FEDERAL ITEM IDENTIFICATION GUIDE

SHAFTS AND AXLES

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Commander

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BY ORDER OF THE DIRECTOR

/s/

Commander

Defense Logistics Information Service

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GENERAL INFORMATION

1. Purpose and Scope

This Federal Item Identification Guide (FIIG) is a self-contained document for the collection, coding, transmittal, and retrieval of item characteristics and related supply management data for an item of supply for logistical use. This FIIG is to be used to describe items of supply identified by the index of approved item names appearing in this section.

2. Contents

This FIIG is comprised of the following:

Index of Approved Item Names Covered by this FIIG
Applicability Key Index
Section I - Item Characteristics Data Requirements
Section III - New text that should be here.
Appendix A - Reply Tables
Appendix B - Reference Drawing Groups (as applicable)
Appendix C - Technical Data Tables (as applicable)

a. Index of Approved Item Names Covered by this FIIG:

The index lists the approved item names with definitions and item name codes as they appear in Cataloging Handbook H6, applicable to this FIIG. In addition, each name entry is assigned an applicability key for use in relating the characteristics requirements in Section I to the specific item name.

b. Applicability Key Index:

The purpose of this index is to provide the user with a ready reference for determining the specific requirements which are applicable to a given approved item name. This index lists all requirements in sequence as they appear in the FIIG. The applicability of a Master Requirement Coded requirement is indicated by the column headed by the specific item name applicability key as follows:

(1) The letter "X" indicates the requirement must be answered for a full descriptive item.

(2) The letters "AR" indicate the requirement is to be answered as required by (1) instructional notes within the FIIG; (2) when the reply is predicated on replies to a related main requirement; or (3) when an asterisk (*) is used in conjunction with the applicability key column in Section I.

(3) A blank in the column indicates the requirement is not applicable to the specific item name.

c. Section I - Item Characteristics Data Requirements:

This section contains the physical and performance characteristics requirements needed to describe and identify an item of supply. These characteristics differentiate one item from all other items of supply and are to be used to meet the needs of all supported functions. This section is arranged in columns. Identification of each column and instructions pertinent thereto are as follows:

(1) Applicability Key:

The first column shows the applicability key(s) for each requirement. It indicates whether the requirement need be satisfied for the item being identified. "ALL" indicates that the requirement must be answered for all items covered by the FIIG. One or more alphabetic character(s) or group of one or more alphabetic characters indicates a response is required when describing items with an approved item name or names represented by the key(s). An asterisk (*) used in conjunction with any applicability key indicates that the characteristic stated in the requirement may not be applicable to all items covered by the FIIG.

(2) Master Requirement Codes (MRC):

A four-position code which is assigned to a FIIG requirement for identification of the requirement, cross-referencing requirements in the various sections and appendices of the FIIG, and for mechanized processing and retrieval of FIIG generated data. Absence of a MRC for a requirement indicates a lead-in to requirements with individual MRCs in Appendix B.

(a) The coding technique for providing MULTIPLE/OPTIONAL responses will not be used for a Section I requirement assigned Mode Code A or L that leads to Appendix B sketches with dimensional requirements.

(b) Identified Secondary Address Coding:

This technique is for extending the Master Requirement Code so that a unique address is provided for each application of the requirement in relation to the item and is authorized only as instructed within the requirement. Responses coded through this technique will always consist of the following: (1) Master Requirement Codes, (2) indicator code (a single numeric character determined by the number of positions contained), (3) identified secondary address code (1 to 3-digit alphabetic codes determined by the number of predicted replies), (4) the mode code, (5) the reply code and/or clear text response, and (6) end with a record separator (*). Steps (1) through (6) are repeated for each application of the requirement.

(c) AND/OR coding:

A technique for extending the Master Requirement Code to provide a distinctive address for multiple responses to the same requirement. Responses coded through this technique will always consist of (1) Master Requirement Code, (2) mode code, (3) the response or reply code (as instructed by the requirement), (4) a single dollar sign ($) for an OR condition, or a double dollar sign ($$) for an AND condition, (5) the mode code, (6) the response or reply code

(followed by conditions (4) through (6) for each of the multiple responses) and (7) end with a record separator (*). NOTE: Apply this technique only when instructed by the requirement sample reply (e.g.).

(3) Mode Code:

A one-position alphabetic code that specifies the manner in which a response will be prepared. Each requirement assigned a MRC is also assigned a mode code. Sample replies follow each FIIG requirement displaying the proper construction of a response for the assigned mode code. The response to a requirement will always be prepared in accordance with the assigned mode code and sample reply except in the following instances:

(a) Use of E Mode Code replies is not authorized. If a reply needed to describe an item is not listed in the applicable table, contact the FIIG Initiator.

(b) Mode Code K may not be used for any requirement unless instructed by the requirement instructions.

(4) Requirement:

This portion includes the characteristics data elements and data use identifiers required to identify and differentiate one item of supply from another, narrative definitions, and explanations as to use and method of expression. Instructions for coding and preparing replies are also provided.

(5) Reply Code:

A code that represents an established authorized reply to a requirement.

d. Section III - Supplementary Technical and Supply Management Data:

This section includes those characteristics requirements necessary to support specific logistics functions other than National Stock Number assignment.

e. Appendix A - Reply Tables:

Tables of authorized replies to requirements and reply codes when the tables are too lengthy for inclusion in Section I/III, when applicable.

f. Appendix B - Reference Drawings:

This appendix contains representative illustrations which portray specific variations of one or more generic characteristics. If reference drawings contain requirements pages to be used in conjunction with illustrations for dimensioning purposes, the requirements pages will contain Master Requirement Codes, mode codes, and a statement of the requirement. A response to requirements on a requirements page is necessary only for those Master Requirement Codes applicable to the illustration selected.

g. Appendix C - Technical Data Tables:

This appendix contains conversion charts and similar data pertinent to the requirements in Section I/III, when applicable.

3. Enter administrative MRC CLQL immediately following the last FIIG requirement reply, as instructed below:

MRC	Mode Code	Requirement	Example
CLQL	G	COLLOQUIAL NAME (common usage name by which an item is known)	CLQLGWOVEN WIRE CLOTH*

4. Special Instructions and Indicator Definitions

a. Measurements:

Unless otherwise indicated within a requirement example, enter all measurements in decimal form, carried to the nearest three decimal places, with a minimum of one digit preceding the decimal. For SI (metric), enter all measurements with a minimum of one digit before and after the decimal. For fraction to decimal conversion, see Appendix C.

b. Indicators:

A cross hatch (#) following an AIN, MRC, Reply Code or Drawing Number indicates for "ALL EXCEPT USA" use only.

5. Indexes

a. Index of Data Requirements

This index is arranged in alphabetic sequence by Master Requirement Code, cross-referenced to the applicable data requirement and page number(s).

b. Index of Approved Item Names

This index is arranged in alphabetic sequence referenced to Applicability Key.

c. Applicability Key Index

This index is arranged in Applicability Key Sequence.

6. Maintenance

Requests for revisions and other changes will be directed to:

Index of Master Requirement Codes

INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG

Approved Item Name	INC	App Key

Axle

1. A bar, usually circular in cross section, either solid or hollow, designed to support rotating members. For items designed to transmit power or motion by rotation, see SHAFT (1) as modified.

AXLE (1), SHOULDERED	40525	A

An axle having two or more different diameters (greater than 0.031 inches (0.79 millimeter)) along the length. It must have one or more of the following conditions: a specified surface finish designation in the range 1 to 125 microinches (0.025 to 3.2 micrometers), peripheral flat(s), circular groove(s), keyway(s), splines, threads, or holes. The ends and/or shoulders may be machined to accommodate bearings, couplings and the like. It is not designed for use in aligning by fitting into corresponding holes of another item. For items used to transmit motion see SHAFT (1), SHOULDERED. For items not having any of the above conditions see PIN, SHOULDER, HEADLESS. Excludes SHAFT (1), STRAIGHT and AXLE (1), STRAIGHT.

AXLE (1), STRAIGHT	40524	B

A straight axle having two or more of the following conditions: a specified surface finish designation in the range 1 to 125 microinches (0.025 to 3.2 micrometers), arithmetical average (AA), machined peripheral flat(s), circular groove(s), keyway(s), splines, threads, or holes. It is not designed for use in aligning by fitting into corresponding holes of another item. It may be drilled for lubricating holes. For items having an integral gear(s) or worm(s), see GEARSHAFT (as modified). For items not having the above conditions see PIN, STRAIGHT, HEADLESS. For items used to transmit motion see SHAFT, STRAIGHT. For items having machined ends which constitute steps see AXLE (1), SHOULDERED. Excludes SHAFT (1), SHOULDERED and BOLT, FLUID PASSAGE.

Shaft

1. A bar, usually circular in cross section, either solid or hollow, designed to transmit power or motion by rotation. For items designed to support rotating members, see AXLE (1) as modified.

SHAFT (1), RUDDER	36922	A

A shaft with either keyed, threaded and/or tapered first end with a foot, or tapered keyed shaft second end to accept a rudder.

Approved Item Name	INC	App Key
SHAFT (1), SHOULDERED	22914	A

A shaft having two or more different diameters (greater than 0.031 inches (0.79mm)) along its length. It must have one or more of the following conditions: a specified surface finish designation in the range 1 to 125 microinches (0.025 to 3.2 micrometers), arithmetical average (AA), machined peripheral flat(s), circular groove(s), keyway(s), splines, threads, or holes. The ends and/or shoulders of the shaft may be machined to accommodate bearings, couplings and the like. It is not designed for use in aligning by fitting into corresponding holes of another item. For items used to support rotating members see AXLE (1), SHOULDERED. For items not having any of the above conditions see PIN, SHOULDER, HEADLESS. Excludes SHAFT (1), STRAIGHT; and AXLE (1), STRAIGHT.

SHAFT (1), STRAIGHT	22109	B

A straight shaft having two or more of the following conditions: a specified surface finish designation in the range of 1 to 125 microinches (0.025 to 3.2 micrometers), arithmetical average (AA), machined peripheral flat(s), circular groove(s), keyway(s), splines, threads, or holes. It is not designed for use in aligning by fitting into corresponding holes of another item. It may be drilled for lubricating holes. For items having an integral gear(s) or worm(s), see GEARSHAFT (as modified). For items designed to support rotating members see AXLE (1), STRAIGHT. For items not having the above conditions see PIN, STRAIGHT HEADLESS. For items having machined ends which constitute steps see SHAFT (1), SHOULDERED; AXLE (1), SHOULDERED; and BOLT, FLUID PASSAGE.

APPLICABILITY KEY INDEX

	A	B
NAME	X	X
MATT	X	X
MDCL	AR	AR
CSYM	AR	AR
AAGZ	X	X
AAHG	AR	AR
AAHH	AR	AR
ACKY	AR	AR
AKTM	AR	AR
AMCM	AR	AR
AMCR	AR	AR
AMCS	AR	AR
AMCW	AR	AR
AMCX	AR	AR
AMCY	AR	AR
AMCZ	AR	AR
AMDE	AR	AR
AMDG	AR	AR
AMDH	AR	AR
AMDJ	AR	AR
AMDK	AR	AR
AMDL	AR	AR
AMDM	AR	AR
AMDN	AR	AR
AMDP	AR	AR
AMDS	AR	AR
AMDT	AR	AR
AMDW	AR	AR
AMDX	AR	AR
AMDZ	AR	AR
AMEA	AR	AR
AMEB	AR	AR
AMEJ	AR	AR
AMEL	AR	AR
AMEP	AR	AR
AMER	AR	AR
AMES	AR	AR
AMFB	AR	AR
AMFC	AR	AR
AMFD	AR	AR
AMFG	AR	AR
AMFH	AR	AR
CSQZ	AR	AR
CSRG	AR	AR
CSSW	AR	AR
AAHW	AR	AR
AAHX	AR	AR
ACMD	AR	AR

AKTN	AR	AR
AMFJ	AR	AR
AMFL	AR	AR
AMFM	AR	AR
AMFN	AR	AR
AMFP	AR	AR
AMFQ	AR	AR
AMFR	AR	AR
AMFS	AR	AR
AMFT	AR	AR
AMFW	AR	AR
AMFX	AR	AR
AMFY	AR	AR
AMFZ	AR	AR
AMGA	AR	AR
AMGB	AR	AR
AMGC	AR	AR
AMGF	AR	AR
AMGH	AR	AR
AMGR	AR	AR
AMGS	AR	AR
AMGT	AR	AR
AMHA	AR	AR
AMHD	AR	AR
AMHK	AR	AR
AMHL	AR	AR
AMHM	AR	AR
AMHP	AR	AR
AMHQ	AR	AR
AMHS	AR	AR
AMHT	AR	AR
AMHW	AR	AR
AMJA	AR	AR
AMJB	AR	AR
CTBM	AR	AR
CTFK	AR	AR
CTLC	AR	AR
CWBK	AR	AR
CXDD	AR	AR
AMDR	AR	AR
AMFE	AR	AR
CWFJ	AR	AR
CWLQ	AR	AR
AMGE	AR	AR
AMHY	AR	AR
AMHZ	AR	AR
CXYR	AR	AR
BDSQ	AR	AR
BDSR	AR	AR
AAHN	X	X
AAHP	AR	AR
AAHG	AR	AR
AAHH	AR	AR
ACKY	AR	AR
AKTM	AR	AR
AMCM	AR	AR
AMCR	AR	AR

AMCS	AR	AR
AMCW	AR	AR
AMCX	AR	AR
AMCY	AR	AR
AMCZ	AR	AR
AMDE	AR	AR
AMDG	AR	AR
AMDH	AR	AR
AMDJ	AR	AR
AMDK	AR	AR
AMDL	AR	AR
AMDM	AR	AR
AMDN	AR	AR
AMDP	AR	AR
AMDS	AR	AR
AMDT	AR	AR
AMDW	AR	AR
AMDX	AR	AR
AMDZ	AR	AR
AMEA	AR	AR
AMEB	AR	AR
AMEJ	AR	AR
AMEL	AR	AR
AMEP	AR	AR
AMER	AR	AR
AMES	AR	AR
AMFB	AR	AR
AMFC	AR	AR
AMFD	AR	AR
AMFG	AR	AR
AMFH	AR	AR
CSQZ	AR	AR
CSRG	AR	AR
CSSW	AR	AR
AAHW	AR	AR
AAHX	AR	AR
ACMD	AR	AR
AKTN	AR	AR
AMFJ	AR	AR
AMFL	AR	AR
AMFM	AR	AR
AMFN	AR	AR
AMFP	AR	AR
AMFQ	AR	AR
AMFR	AR	AR
AMFS	AR	AR
AMFT	AR	AR
AMFW	AR	AR
AMFX	AR	AR
AMFY	AR	AR
AMFZ	AR	AR
AMGA	AR	AR
AMGB	AR	AR
AMGC	AR	AR
AMGF	AR	AR
AMGH	AR	AR
AMGR	AR	AR

AMGS	AR	AR
AMGT	AR	AR
AMHA	AR	AR
AMHD	AR	AR
AMHK	AR	AR
AMHL	AR	AR
AMHM	AR	AR
AMHP	AR	AR
AMHQ	AR	AR
AMHS	AR	AR
AMHT	AR	AR
AMHW	AR	AR
AMJA	AR	AR
AMJB	AR	AR
CTBM	AR	AR
CTFK	AR	AR
CTLC	AR	AR
CWBK	AR	AR
CXDD	AR	AR
AMDR	AR	AR
AMFE	AR	AR
CWFJ	AR	AR
CWLQ	AR	AR
AMGE	AR	AR
AMHY	AR	AR
AMHZ	AR	AR
CXYR	AR	AR
BDSQ	AR	AR
BDSR	AR	AR
CSPY	X	
ABHP	X	X
ATPC	X	
FEAT	AR	AR
TEST	AR	AR
SPCL	AR	AR
ZZZK	X	X
ZZZT	AR	AR
ZZZW	AR	AR
ZZZX	AR	AR
ZZZY	X	X
CRTL	AR	AR
PRPY	AR	AR
ELRN	AR	AR
ELCD	X	X
AGAV	AR	AR
BBRJ	AR	AR
PKWT	AR	AR
AFJN	AR	AR
BBRH	AR	AR
BBRG	AR	AR
SUPP	AR	AR
ZZZP	AR	AR
ZZZV	AR	AR
PKQT	AR	AR
EXQT	AR	AR
SUWT	AR	AR
ECWT	AR	AR

SUCB	AR	AR
EXME	AR	AR
CXCY	AR	AR
HZRD	AR	AR
SHPN	AR	AR
DENN	AR	AR
WLBL	AR	AR

SECTION I

APP Key	MRC	Mode Code	Requirements
ALL			
	NAME	D	ITEM NAME

Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.

Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED22914*)

ALL			
	MATT	D	MATERIAL

Definition: THE CHEMICAL COMPOUND OR MECHANICAL MIXTURE PROPERTIES OF WHICH THE ITEM IS FABRICATED.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 1. (e.g., MATTDCUA000*; MATTDCUA000$DCUB000*; MATTDCUA000$$DCUB000*)

ALL *			
	MDCL	J	MATERIAL DOCUMENT AND CLASSIFICATION

Definition: THE SPECIFICATION, STANDARD, OR MANUFACTURERS REFERENCE, AND THE CLASSIFICATION DESIGNATION, SUCH AS CLASS, CONDITION, TEMPER, AND THE LIKE, THAT IDENTIFIES THE MATERIAL.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the document designator and classification.

(e.g., MDCLJDAMIL-P-3803*;

MDCLJDAMIL-P-3803$$JDAMIL-I-7444, TYPE 1, CLASS 1*;

MDCLJDAMIL-P-3803$JDAMIL-I-7444, TYPE 1, CLASS 1*)

Table 1

REPLY CODE	REPLY (AP33)
G	ASSN STD
B	FED SPEC
C	FED STD
F	MFR REF

APP Key	MRC	Mode Code	Requirements
		D	MIL SPEC
		E	MIL STD
		H	NATIONAL SPEC

Table 2

REPLY CODE	REPLY (AP18)
G	ALL MATERIAL RESPONSES (use only when all material is controlled by the same document and classifications are identical)
A	SINGLE MATERIAL RESPONSE
B	1ST MATERIAL RESPONSE
C	2ND MATERIAL RESPONSE
D	3RD MATERIAL RESPONSE
E	4TH MATERIAL RESPONSE
F	5TH MATERIAL RESPONSE

ALL *

CSYM J SURFACE FINISH

Definition: DESIGNATES THE SPECIFIC SURFACE ROUGHNESS RATING, REPRESENTING THE ARITHMETIC AVERAGE DEVIATION OF THE SURFACE FROM THE MEANLINE IN PROFILE.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., CSYMJB125.0*)

If the surface finish is not the same for all parts of the shaft enter the reply for the part with the lowest arithmetical average (AA) finish.

The roughness of machined surfaces is designated by numerical values: A high number indicates a coarse finish, lesser numbers indicate finer finishes.

REPLY CODE	REPLY (AE86)
B	MICROINCHES
C	MICRONS

APP Key	MRC	Mode Code	Requirements
			A. WHEN STRAIGHT SHAFTS HAVE IDENTICAL END STYLES, WITH IDENTICAL DIMENSIONS, EITHER END MAY BE DESIGNATED AS THE FIRST END. WHEN STRAIGHT SHAFTS HAVE IDENTICAL END STYLES, BUT DIFFER DIMENSIONALLY, THE CHARACTERISTIC OF THE END STYLE THAT HAS THE SMALLEST DIMENSION IN THE REQUIREMENT TABLE SEQUENCE (INDEX OF MASTER REQUIREMENT CODES IN APPENDIX B, REFERENCE DRAWING GROUP A) WILL BE DESIGNATED THE FIRST END. (E.G., A SHAFT WITH IDENTICAL END STYLES NUMBER 3 IN RDG A, BUT WITH DIFFERENT SIZE KEYWAYS WOULD USE KEYWAY WIDTH AS THE DETERMINING FACTOR IF THIS DIMENSION IS DIFFERENT FOR BOTH ENDS. IF THIS DIMENSION IS IDENTICAL, PROCEED TO EXTERNAL KEYWAY LENGTH.) B. WHEN STRAIGHT SHAFTS HAVE DIFFERENT END STYLES, THE END HAVING THE SMALLER NUMERICAL STYLE NUMBER AS INDICATED IN REFERENCE DRAWING GROUP A BECOMES THE FIRST END. METHODS FOR DETERMINING FIRST AND SECOND ENDS OF SHOULDERED SHAFTS: A. WHEN SHOULDERED SHAFTS HAVE IDENTICAL END STYLES, THE END HAVING THE GREATEST QUANTITY OF SHOULDERS WILL BE DESIGNATED AS THE FIRST END. B. WHEN SHOULDER SHAFTS HAVE IDENTICAL END STYLES WITH, THE SAME QUANTITY OF SHOULDERS ON EACH END, THAT ARE IDENTICAL DIMENSIONALLY, EITHER END MAY BE DESIGNATED AS THE FIRST END. C. WHEN SHOULDERED SHAFTS HAVE IDENTICAL END STYLES, WITH THE SAME QUANTITY OF SHOULDERS ON EACH END THAT DIFFER IN SIZE, THE END THAT HAS THE SMALLER TOTAL OVERALL LENGTH (E.G., THE SUM OF THE INDIVIDUAL SHOULDER LENGTHS) WILL BE DESIGNATED THE FIRST END. D. WHEN SHOULDERED SHAFTS HAVE DIFFERENT END STYLES, THE END HAVING THE SMALLER NUMERICAL STYLE NUMBER (AS INDICATED IN REFERENCE DRAWING GROUP A) BECOMES THE FIRST END.NOTE FOR MRCS AAGZ AND AAHP: METHODS FOR DETERMINING FIRST AND SECOND ENDS OF STRAIGHT SHAFTS: A. WHEN STRAIGHT SHAFTS HAVE IDENTICAL END STYLES, WITH IDENTICAL DIMENSIONS, EITHER END MAY BE DESIGNATED AS THE FIRST END. WHEN STRAIGHT SHAFTS HAVE IDENTICAL END STYLES, BUT DIFFER DIMENSIONALLY, THE CHARACTERISTIC OF THE END STYLE THAT HAS THE SMALLEST DIMENSION IN THE REQUIREMENT TABLE SEQUENCE (INDEX OF MASTER REQUIREMENT CODES IN APPENDIX B, REFERENCE DRAWING GROUP A) WILL BE DESIGNATED THE FIRST END. (E.G., A SHAFT WITH IDENTICAL END STYLES NUMBER 3 IN RDG A, BUT WITH DIFFERENT SIZE KEYWAYS WOULD USE KEYWAY WIDTH AS THE DETERMINING FACTOR IF THIS DIMENSION IS DIFFERENT FOR BOTH ENDS. IF THIS DIMENSION IS IDENTICAL, PROCEED TO EXTERNAL KEYWAY LENGTH.) B. WHEN STRAIGHT SHAFTS HAVE DIFFERENT END STYLES, THE END HAVING THE SMALLER NUMERICAL STYLE NUMBER AS INDICATED IN REFERENCE DRAWING GROUP A BECOMES THE FIRST END. METHODS FOR DETERMINING FIRST AND SECOND ENDS OF SHOULDERED SHAFTS:A. WHEN SHOULDERED SHAFTS HAVE IDENTICAL END STYLES, THE END HAVING THE GREATEST QUANTITY OF SHOULDERS WILL BE DESIGNATED AS THE FIRST END.B. WHEN SHOULDER SHAFTS HAVE IDENTICAL END STYLES WITH, THE SAME QUANTITY OF SHOULDERS ON EACH END, THAT ARE IDENTICAL DIMENSIONALLY, EITHER END MAY BE DESIGNATED AS THE FIRST END.C. WHEN SHOULDERED SHAFTS HAVE IDENTICAL END STYLES, WITH THE SAME QUANTITY OF SHOULDERS ON EACH END THAT DIFFER IN SIZE, THE END THAT HAS THE SMALLER TOTAL OVERALL LENGTH (E.G., THE SUM OF THE

APP Key	MRC	Mode Code	Requirements

ALL (See Note Above)

AAGZ L FIRST END STYLE

Definition: THE STYLE DESIGNATION INDICATING THE CONFIGURATION THAT MOST NEARLY CORRESPONDS TO THE APPEARANCE OF THE FIRST END.

Reply Instructions: Enter the applicable style number from Appendix B , Reference Drawing Group A. (e.g., AAGZL1*)

ALL

AAHN D END SIMILARITY

Definition: A TERM USED TO IDENTIFY THE ENDS AS IDENTICAL OR NOT IDENTICAL.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AAHNDC)

REPLY CODE	REPLY (AA37)
C	IDENTICAL
B	NOT IDENTICAL

NOTE FOR MRC AAHP: REPLY TO MRC AAHP IF REPLY CODE B IS ENTERED FOR MRC AAHN.

ALL * (See Notes Above and Preceding MRC AAGZ)

AAHP L SECOND END STYLE

Definition: THE STYLE DESIGNATION INDICATING THE CONFIGURATION THAT MOST NEARLY CORRESPONDS TO THE APPEARANCE OF THE SECOND END.

Reply Instructions: Enter the applicable style number from Appendix B , Reference Drawing Group A. (e.g., AAHPL4*)

A

CSPY J LARGEST STEP DIAMETER

APP Key	MRC	Mode Code	Requirements

Definition: THE LENGTH OF A STRAIGHT LINE WHICH PASSES THROUGH THE CENTER OF THE LARGEST STEP, AND TERMINATES AT THE CIRCUMFERENCE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., CSPYJAA2.000*; CSPYJLA50.8*; CSPYJAB2.000$$JAC2.062*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

ALL

ABHP J OVERALL LENGTH

Definition: THE DIMENSION MEASURED ALONG THE LONGITUDINAL AXIS WITH TERMINATED POINTS AT THE EXTREME ENDS OF THE ITEM.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., ABHPJAA12.187*; ABHPJLA309.5*; ABHPJAB12.187$$JAC12.203*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

A

APP Key	MRC	Mode Code	Requirements
	ATPC	A	STEP QUANTITY

Definition: THE NUMBER OF STEPS PROVIDED.

Reply Instructions: Enter the quantity. (e.g., ATPCA7*)

When determining the quantity of steps, you must include the ends of the item.

ALL*

	FEAT	G	SPECIAL FEATURES

Definition: THOSE UNUSUAL OR UNIQUE CHARACTERISTICS OR QUALITIES OF AN ITEM NOT COVERED IN THE OTHER REQUIREMENTS AND WHICH ARE DETERMINED TO BE ESSENTIAL FOR IDENTIFICATION.

Reply Instructions: Enter the reply in clear text. Separate multiple replies with a semicolon. (e.g., FEATGADJUSTABLE NOSE CLIP*; FEATGADJUSTABLE NOSE PIECE; DISPOSABLE*)

ALL*

	TEST	J	TEST DATA DOCUMENT

Definition: THE SPECIFICATION, STANDARD, DRAWING, OR SIMILAR INSTRUMENT THAT SPECIFIES ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS OR TEST CONDITIONS UNDER WHICH AN ITEM IS TESTED AND ESTABLISHES ACCEPTABLE LIMITS WITHIN WHICH THE ITEM MUST CONFORM IDENTIFIED BY AN ALPHABETIC AND/OR NUMERIC REFERENCE NUMBER. INCLUDES THE COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE OF THE ENTITY CONTROLLING THE INSTRUMENT.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the 5-position CAGE Code, a dash, and the document identification number.

(e.g., TESTJA12345-CWX654321*;

TESTJA1234A-654321$$JB5556A-663654*;

TESTJAA2345-654321$JB55566-663654*)

REPLY CODE	REPLY (AC28)
A	SPECIFICATION (Includes engineering type bulletins, brochures, etc., that reflect specification type data in

APP Key	MRC	Mode Code	Requirements
			specification format; excludes commercial catalogs, industry directories, and similar trade publications, reflecting general type data on certain environmental and performance requirements and test conditions that are shown as "typical," "average," "nominal," etc.)
		B	STANDARD (Includes industry or association standards, individual manufacturer standards, etc.)
		C	DRAWING (This is the basic governing drawing, such as a contractor drawing, original equipment manufacturer drawing, etc.; excludes any specification, standard, or other document that may be referenced in a basic governing drawing)

ALL*

SPCL G SPECIAL TEST FEATURES

Definition: TEST CONDITIONS AND RATINGS, OR ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS THAT ARE DIFFERENT, MORE CRITICAL, OR MORE SPECIFIC THAN THOSE SPECIFIED IN A GOVERNING TEST DATA DOCUMENT.

Reply Instructions: Enter the reply in clear text. (e.g., SPCLGSELECTED AND TESTED FOR NAVIGATIONAL SYSTEMS*)

ALL*

ZZZK J SPECIFICATION/STANDARD DATA

Definition: THE DOCUMENT DESIGNATOR OF THE SPECIFICATION OR STANDARD WHICH ESTABLISHED THE ITEM OF SUPPLY.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the Commercial and Government Entity (CAGE) Code of the entity controlling the document, a dash, and the document designator. The agency that controls the limited coordination document must be preceded and followed by a slash following the designator. The word canceled or superseded must be preceded and followed by a slash for the designator. Professional and industrial association specifications/standards are differentiated from a manufacturer's specification in that the data has been coordinated and published by the professional and industrial association. Include amendments and revisions where applicable.

(e.g., ZZZKJT81337-30642B*;

ZZZKJS81349-MIL-D-180 REV1/CANCELED/*;

APP Key	MRC	Mode Code	Requirements

ZZZKJP80205-NAS1103*;

ZZZKJS81349-MIL-C-1140C/CE/*;

ZZZKJT81337-30642B$$JP80205-NAS1103*)

REPLY CODE	REPLY (AN62)
S	GOVERNMENT SPECIFICATION
T	GOVERNMENT STANDARD
D	MANUFACTURERS SOURCE CONTROL
R	MANUFACTURERS SPECIFICATION
N	MANUFACTURERS SPECIFICATION CONTROL
M	MANUFACTURERS STANDARD
B	NATIONAL STD/SPEC
A	PROFESSIONAL/INDUSTRIAL ASSOCIATION SPECIFICATION
P	PROFESSIONAL/INDUSTRIAL ASSOCIATION STANDARD

NOTE FOR MRC ZZZT: IF THE SPECIFICIATION/STANDARD CITED IN REPLY TO MRC ZZZK IS NONDEFINITIVE, REPLY TO MRC ZZZT. THIS REPLY IS THE DATA WHICH IS NOT RECORDED IN SEGMENT C.

ALL * (See Note Above)

ZZZT J NONDEFINITIVE SPEC/STD DATA

Definition: THE NUMBER, LETTER, OR SYMBOL THAT INDICATES THE TYPE, STYLE, GRADE, CLASS, AND THE LIKE, OF AN ITEM IN A NONIDENTIFYING SPECIFICATION OR STANDARD.

Reply Instructions: Enter the applicable Reply Code from Appendix A , Table 2, followed by the appropriate number, letter, or symbol. (e.g., ZZZTJTY1*; ZZZTJTY1$$JSTA*; ZZZTJTY1$JSTA*)

ALL*

ZZZW G DEPARTURE FROM CITED DOCUMENT

APP Key	MRC	Mode Code	Requirements

Definition: THE TECHNICAL DIFFERENTIATING CHARACTERISTIC(S) OF AN ITEM OF SUPPLY WHICH DEPART(S) FROM THE TEXT OF A SPECIFICATION OR A STANDARD IN THAT IT REPRESENTS A SELECTION OF CHARACTERISTICS STATED IN THE SPECIFICATION OR STANDARD AS BEING OPTIONAL, OR A VARIATION FROM ONE OR MORE OF THE STATED CHARACTERISTICS, OR AN ADDITIONAL CHARACTERISTIC NOT STATED IN THE SPECIFICATION OR STANDARD.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZWGAS MODIFIED BY MATERIAL*)

ALL*

ZZZX G DEPARTURE FROM CITED DESIGNATOR

Definition: THE VARIATION WHEN THE ITEM IS IN CONFORMITY WITH A TYPE DESIGNATOR COVERED BY A SPECIFICATION OR STANDARD, EXCEPT IN REGARD TO ONE OR MORE TECHNICAL DIFFERENTIATING CHARACTERISTICS.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZXGAS MODIFIED BY MATERIAL*)

ALL*

ZZZY G REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS

Definition: A FEATURE OF THE ITEM OF SUPPLY WHICH MUST BE SPECIFICALLY RECORDED WHEN THE REFERENCE NUMBER COVERS A RANGE OF ITEMS.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZYGCOLOR CODED LEADS*; ZZZYGAS DIFFERENTIATED BY MATERIAL*)

ALL*

CRTL A CRITICALITY CODE JUSTIFICATION

Definition: THE MASTER REQUIREMENT CODES OF THOSE REQUIREMENTS WHICH ARE TECHNICALLY CRITICAL BY REASON OF TOLERANCE, FIT, PERFORMANCE, OR OTHER CHARACTERISTICS WHICH AFFECT IDENTIFICATION OF THE ITEM.

APP Key	MRC	Mode Code	Requirements

Reply Instructions: Enter the Master Requirement Code for the requirement, the reply to which renders the item as being critical. (e.g., CRTLAMATL*; CRTLAMATL$$ASURF*)

Reply to this requirement only if the header record for the item identification for the item being identified has been coded as critical.

NOTE FOR MRC PRPY: IF DOCUMENT AVAILABILITY CODE B, D, F, OR H, REPLY TO MRC PRPY.

ALL* (See Note Above)

PRPY A PROPRIETARY CHARACTERISTICS

Definition: IDENTIFICATION OF THOSE CHARACTERISTICS INCLUDED IN THE DESCRIPTION FOR WHICH A NON-GOVERNMENT ACTIVITY HAS IDENTIFIED ALL OR SELECTED CHARACTERISTICS OF THE ITEM AS BEING PROPRIETARY AND THEREFORE RESTRICTED FROM RELEASE OUTSIDE THE GOVERNMENT WITHOUT PRIOR PERMISSION OF THE ORIGINATOR OF THE DATA.

Reply Instructions: Enter the MRC codes of the individual characteristics of the description which are marked proprietary on the technical data, using AND coding ($$) for multiple characteristics. If all the MRCs are proprietary, enter the reply PACS. If none of the MRCs is proprietary, enter the reply NPAC. (e.g., PRPYAPACS*; PRPYANPAC*; PRPYAMATL$$ASURF*)

ALL*

ELRN G EXTRA LONG REFERENCE NUMBER

Definition: A REFERENCE NUMBER EXCEEDING 32 POSITIONS.

Reply Instructions: Enter the entire reference number. Do not include the 5-position Commercial and Government Entity (CAGE) Code unless there is more than one extra long reference number on the NSN, (e.g., ELRNGANN112036BIL060557LEN313605UZ62365*).

If there is more than one extra long reference number on the NSN, include the CAGE or NCAGE and separate each reference by using the "&" character, (e.g., 28480 ANN112036BIL060557LEN313605UZ62365 & S1234 NN112036BIL060557LEN313605UZ62365).

APP Key	MRC	Mode Code	Requirements

In determining quantity of characters in the reference number, count will be made after modification in accordance with Volume 2, Chapter 9, FLIS Procedures Manual, DoD 4100.39-M.

ALL*

ELCD D EXTRA LONG CHARACTERISTIC DESCRIPTION

Definition: A DESCRIPTION THAT EXCEEDS 5000 CHARACTERS.

Reply Instructions: Enter the Reply Code from the table below. (e.g., ELCDDA*)

REPLY CODE	REPLY (AN58)
A	ADDITIONAL DESCRIPTIVE DATA ON MANUAL RECORD

SECTION III

APP Key	MRC	Mode Code	Requirements

ALL

AGAV G END ITEM IDENTIFICATION

Definition: THE NATIONAL STOCK NUMBER OR THE IDENTIFICATION INFORMATION OF THE END EQUIPMENT FOR WHICH THE ITEM IS A PART.

Reply Instructions: Enter the applicable reply in clear text.

(e.g., AGAVG3930-00-000-0000*;

AGAVGFORKLIFT TRUCK, SMITH CORPORATION, MODEL 12, TYPE A*)

ALL

BBRJ D SPECIAL HANDLING FEATURE

APP Key	MRC	Mode Code	Requirements

Definition: THE UNUSUAL OR UNIQUE CHARACTERISTIC(S) OR QUALITY(IES) OF AN ITEM WHICH NECESSITATES THE ESTABLISHMENT OF A REQUIREMENT FOR SPECIAL HANDLING.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BBRJDAK*)

REPLY CODE	REPLY (AM83)
AS	CORROSIVE LIQUID
AD	FLAMMABLE
AK	MAGNETIC

ALL

PKWT J UNPACKAGED UNIT WEIGHT

Definition: THE MEASURED WEIGHT OF AN ITEM UNENCUMBERED BY PACKAGING OR PACKING MATERIAL.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., PKWTJLB0.50*; PKWTJKG0.22*)

REPLY CODE	REPLY (AN75)
KG	KILOGRAMS
LB	POUNDS

ALL

AFJN D FRAGILITY FACTOR

Definition: THE MEASURE OF SENSITIVITY OF THE ITEM TO BE PACKAGED. A FACTOR USED BY PACKAGING ENGINEERS IN DEVISING PROPER CUSHIONING IN A PACKAGE.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AFJNDB*)

REPLY CODE	REPLY (AD40)
D	DELICATE
B	EXTREMELY FRAGILE
E	MODERATELY DELICATE
F	MODERATELY RUGGED

APP Key	MRC	Mode Code	Requirements
		G	RUGGED
		C	VERY DELICATE

ALL

BBRH J INSPECTION FREQUENCY

Definition: THE SPECIFIED TIME INTERVAL, FROM RECEIPT, NECESSARY TO DETECT MATERIAL DETERIORATION THAT WILL AFFECT STOCK READINESS.

Reply Instructions: Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., BBRHJMHAB6*; BBRHJMHAB6$$JMHAC6*)

Table 1

REPLY CODE	REPLY (AH68)
DY	DAYS
MH	MONTHS

Table 2

REPLY CODE	REPLY (AM82)
AB	FIRST INSPECTION
AC	REINSPECTION

ALL

BBRG D STORAGE TYPE

Definition: INDICATES THE TYPE OF STORAGE SPACE REQUIRED FOR AN ITEM IN ORDER TO PROVIDE THE DEGREE OF PROTECTION NECESSARY TO MAINTAIN SERVICEABILITY STANDARDS.

Reply Instructions: Enter the Reply Code from the table below. (e.g., BBRGDAC*)

REPLY CODE	REPLY (AM81)
AC	CLOSED SHED
AD	CONTROLLED HUMIDITY WAREHOUSE
AM	DEHUMIDIFIED WAREHOUSE
AE	GENERAL PURPOSE WAREHOUSE
AN	HEATED WAREHOUSE
AH	OPEN SHED
AJ	UNHEATED WAREHOUSE

APP Key	MRC	Mode Code	Requirements
ALL			
	SUPP	G	SUPPLEMENTARY FEATURES
	Definition: CHARACTERISTICS OR QUALITIES OF AN ITEM, NOT COVERED IN ANY OTHER REQUIREMENT, WHICH ARE CONSIDERED ESSENTIAL INFORMATION FOR ONE OR MORE FUNCTIONS EXCLUDING NSN ASSIGNMENT.		
	Reply Instructions: Enter the reply in clear text. (e.g., SUPPGMAY INCL HOLE IN UPPER SUPPORT FOR MTG DURING SHIPMENT*)		
ALL			
	ZZZP	J	PURCHASE DESCRIPTION IDENTIFICATION
	Definition: THE CONTROLLING ACTIVITY AND IDENTIFICATION OF A DOCUMENT USED IN LIEU OF A SPECIFICATION IN THE PROCUREMENT OF AN ITEM OF SUPPLY.		
	Reply Instructions: Enter the 5-position Commercial and Government Entity (CAGE) Code, followed by a dash and the identifying number of the document.		
	(e.g., ZZZPJ81A37-30624A*)		
ALL			
	ZZZV	G	FSC APPLICATION DATA
	Definition: THE JUSTIFICATION FOR THE ASSIGNMENT OF A FEDERAL SUPPLY CLASS (FSC) TO AN ITEM BASED ON THE CLASSIFICATION OF THE NEXT HIGHER CLASSIFIABLE ASSEMBLY.		
	Reply Instructions: Enter the name of the next higher classifiable assembly in clear text. (e.g., ZZZVGFUEL SYSTEM, GASOLINE ENGINE, NONAIRCRAFT*)		
ALL			
	PKQT	A	INTERMEDIATE PACKAGE QUANTITY
	Definition: THE NUMBER OF WRAPS, BOXES, OR BUNDLES, WHICH CONTAINS TWO OR MORE UNITS OF ISSUE, PLACED INSIDE AN EXTERIOR CONTAINER.		
	Reply Instructions: Enter the quantity. (e.g., PKQTA24*)		

APP Key	MRC	Mode Code	Requirements
ALL			
	EXQT	A	EXTERIOR CONTAINER QUANTITY

Definition: THE NUMBER OF UNITS OF ISSUE PLACED INSIDE THE EXTERIOR CONTAINER.

Reply Instructions: Enter the quantity. (e.g., EXQTA2*)

ALL

SUWT J UNIT OF ISSUE WEIGHT

Definition: THE MEASURED WEIGHT OF THE ACTUAL CONTAINER(S) OR SUPPORTING DEVICE(S) WHICH IS IN DIRECT CONTACT WITH THE ITEM AND ITS CONTENTS.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., SUWTJLB4.50*; SUWTJKG2.04*)

REPLY CODE	REPLY (AN75)
KG	KILOGRAMS
LB	POUNDS

ALL

ECWT J EXTERIOR CONTAINER WEIGHT

Definition: THE MEASURED WEIGHT OF THE EXTERIOR CONTAINER.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., ECWTJLB8.00*; ECWTJKG3.63*)

REPLY CODE	REPLY (AN75)
KG	KILOGRAMS
LB	POUNDS

ALL

SUCB J UNIT OF ISSUE CUBE

APP Key	MRC	Mode Code	Requirements

Definition: A MEASUREMENT OF VOLUME TAKEN BY MULTIPLYING THE LENGTH BY THE WIDTH BY THE HEIGHT OF THE UNIT OF ISSUE AND RENDERED IN CUBIC UNITS.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., SUCBJCF9.00*; SUCBJCM1.50*)

REPLY CODE	REPLY (AN76)
CF	CUBIC FEET
CM	CUBIC METERS

ALL

EXME J EXTERIOR CONTAINER CUBIC MEASURE

Definition: A MEASUREMENT OF VOLUME TAKEN BY MULTIPLYING THE LENGTH BY THE WIDTH BY THE HEIGHT OF THE EXTERIOR CONTAINER AND RENDERED IN CUBIC UNITS.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., EXMEJCF12.00*; EXMEJCM36.75*)

REPLY CODE	REPLY (AN76)
CF	CUBIC FEET
CM	CUBIC METERS

ALL

CXCY G PART NAME ASSIGNED BY CONTROLLING AGENCY

Definition: THE NAME ASSIGNED TO THE ITEM BY THE GOVERNMENT AGENCY OR COMMERCIAL ORGANIZATION CONTROLLING THE DESIGN OF THE ITEM.

Reply Intructions: Enter the reply in clear text.

(e.g., CXCYGLINE PROCESSOR CONTROL BOARD*)

ALL

HZRD D HAZARDOUS SUBSTANCES

APP Key	MRC	Mode Code	Requirements

Definition: THE SUBSTANCES AND/OR MATERIALS CONTAINED IN THE ITEM THAT HAVE BEEN IDENTIFIED AS HAZARDOUS OR ENVIRONMENTALLY DAMAGING BY THE ENVIRONMENTAL PROTECTION AGENCY OR OTHER AUTHORIZED GOVERNMENT AGENCY.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., HZRDDHAZ011*; HZRDDHAZ011$$DHAZ012*)

REPLY CODE	REPLY (HZ00)
HAZ011	CHROMIUM
HAZ012	COPPER

ALL

SHPN A DOT PROPER SHIPPING NAME

Definition: THE PROPER SHIPPING NAME AS IDENTIFIED BY THE DEPARTMENT OF TRANSPORTATION (DOT) AND LISTED IN THE TITLE 49 CODE OF FEDERAL REGULATIONS (CFR), PART 172, HAZARDOUS MATERIALS TABLE.

Reply Instructions: Enter the applicable proper shipping name as identified in Title 49 CFR, Part 172, Hazardous Materials Table 172.101 and referenced paragraphs. (e.g., SHPNACHROMIUM*; SHPNACHROMIUM$$ACOPPER*)

ALL

DENN A DOT IDENTIFICATION NUMBER

Definition: THE IDENTIFICATION NUMBER ASSIGNED BY THE DEPARTMENT OF TRANSPORTATION (DOT) TO EACH PROPER SHIPPING NAME. IDENTIFICATION NUMBERS PRECEDED BY THE LETTERS "UN" ARE ASSOCIATED WITH INTERNATIONAL AS WELL AS DOMESTIC TRANSPORTATION AND THOSE PRECEDED BY THE LETTERS "NA" ARE NOT RECOGNIZED FOR INTERNATIONAL TRANSPORTATION OF HAZARDOUS MATERIALS (DANGEROUS GOODS) EXCEPT TO AND FROM THE UNITED STATES AND CANADA.

Reply Instructions: Enter the applicable alpha-numeric Identification Number assigned to the proper shipping name as appears in the Title 49 Code of Federal Regulations, Part 172, Hazardous Materials Tables. (e.g., DENNAUN2212*; DENNANA1759*)

ALL

APP Key	MRC	Mode Code	Requirements
	WLBL	A	DOT WARNING LABEL CODE

Definition: THE WARNING LABEL CODE ASSIGNED BY THE DEPARTMENT OF TRANSPORTATION (DOT) TO EACH PACKAGE OR CONTAINMENT DEVICE OFFERED FOR TRANSPORTATION OF A HAZARDOUS MATERIAL WHICH MEETS ONE OR MORE HAZARD CLASS DEFINITIONS IN ACCORDANCE WITH TITLE 49 CODE OF FEDERAL REGULATIONS (CFR), PART 172, HAZARDOUS MATERIALS TABLE.

Reply Instructions: Enter the applicable numeric or alpha-numeric labeling requirements as appears in the DOT Title 49 CFR, Part 172, Hazardous Materials Table. For items requiring more than one label, enter the primary label first. (e.g., WLBLACLASS 9*; WLBLACORROSIVE*; WLBLACORROSIVE$$AFLAMMABLE LIQUID*)

Reply Tables

Table 1 - MATERIALS

MATERIALS

REPLY CODE	REPLY (MA01)
ALA000	ALUMINUM
ALB000	ALUMINUM ALLOY
AL0274 #	ALUMINUM ALLOY 3.2318
AL2017	ALUMINUM ALLOY 2017
AL2024	ALUMINUM ALLOY 2024
AL5083	ALUMINUM ALLOY 5083
AL5086	ALUMINUM ALLOY 5086
AL6061	ALUMINUM ALLOY 6061
AL7075	ALUMINUM ALLOY 7075
BEA000	BERYLLIUM
BEB000	BERYLLIUM COPPER
	Brass (use Reply Code CUB000)
	Bronze (use Reply Code CUB000)
CLD000	CERAMIC
CRA000	CHROMIUM
CTA000	COBALT
CTB000	COBALT ALLOY
CUA000	COPPER
CUB000	COPPER ALLOY
	Copper Alloy CA360 (use Reply Code CU0091)
CU0382 #	COPPER ALLOY 2.0960
CU0091	COPPER ALLOY 360
CU0632	COPPER ALLOY 632
CU0675	COPPER ALLOY 675
CU0206	COPPER ALLOY 932
GSA000	GLASS
GSB000	GLASS FIBER
FEA000	IRON
FE0019	IRON ALLOY 660
MGB000	MAGNESIUM ALLOY
MNA000	MANGANESE
NLA000	NICKEL
NLB000	NICKEL ALLOY
NL0001	NICKEL ALLOY A

REPLY CODE	REPLY (MA01)
NL0018	NICKEL ALLOY K-500
NL0017	NICKEL ALLOY R-405
NL0008	NICKEL ALLOY 400
NL0049	NICKEL ALLOY 404
NL0019	NICKEL ALLOY 502
NL0010	NICKEL ALLOY 718
PCA000	PLASTIC
PCJ000	PLASTIC MELAMINE
PCN000	PLASTIC PHENOLIC
PCP000	PLASTIC POLYAMIDE
STA000	STEEL
ST0028	STEEL COMP E4340
ST0957 #	STEEL COMP Z30C13
ST2055 #	STEEL COMP 1.0504
ST2056 #	STEEL COMP 1.1209
ST2057 #	STEEL COMP 1.2082
ST2072	STEEL COMP 1.4404
ST2058 #	STEEL COMP 1.4460
ST2059 #	STEEL COMP 1.5752
ST2060 #	STEEL COMP 1.6562
ST2000 #	STEEL COMP 1.6582
ST2061 #	STEEL COMP 1.7227
ST2062 #	STEEL COMP 1.7228
ST2063 #	STEEL COMP 1.7321
ST0063	STEEL COMP 12L14
ST1637	STEEL COMP 16NC6
ST0071	STEEL COMP 17-4PH
ST1676 #	STEEL COMP 30NCD16
ST1677 #	STEEL COMP 30NC11
ST0302	STEEL COMP 302
ST0303	STEEL COMP 303
ST0078	STEEL COMP 303S
ST0079	STEEL COMP 303SE
ST0304	STEEL COMP 304
ST0080	STEEL COMP 304L
ST0310	STEEL COMP 310
ST0316	STEEL COMP 316
ST0082	STEEL COMP 316L
ST0321	STEEL COMP 321
ST0347	STEEL COMP 347
ST0403	STEEL COMP 403
ST0410	STEEL COMP 410
ST0416	STEEL COMP 416
ST0098	STEEL COMP 416F
ST0099	STEEL COMP 416SE
ST0420	STEEL COMP 420
ST0431	STEEL COMP 431
ST0107	STEEL COMP 440C

REPLY CODE	REPLY (MA01)
ST1009	STEEL COMP 1009
ST1010	STEEL COMP 1010
ST1011	STEEL COMP 1011
ST1012	STEEL COMP 1012
ST1013	STEEL COMP 1013
ST1015	STEEL COMP 1015
ST1016	STEEL COMP 1016
ST1017	STEEL COMP 1017
ST1018	STEEL COMP 1018
ST1019	STEEL COMP 1019
ST1020	STEEL COMP 1020
ST1021	STEEL COMP 1021
ST1022	STEEL COMP 1022
ST1023	STEEL COMP 1023
ST1024	STEEL COMP 1024
ST1025	STEEL COMP 1025
ST1026	STEEL COMP 1026
ST1027	STEEL COMP 1027
ST1029	STEEL COMP 1029
ST1030	STEEL COMP 1030
ST1034	STEEL COMP 1034
ST1035	STEEL COMP 1035
ST1038	STEEL COMP 1038
ST1040	STEEL COMP 1040
ST1041	STEEL COMP 1041
ST1042	STEEL COMP 1042
ST1043	STEEL COMP 1043
ST1045	STEEL COMP 1045
ST1046	STEEL COMP 1046
ST1048	STEEL COMP 1048
ST1049	STEEL COMP 1049
ST1050	STEEL COMP 1050
ST1052	STEEL COMP 1052
ST1060	STEEL COMP 1060
ST1065	STEEL COMP 1065
ST1066	STEEL COMP 1066
ST1069	STEEL COMP 1069
ST1070	STEEL COMP 1070
ST1072	STEEL COMP 1072
ST1074	STEEL COMP 1074
ST1075	STEEL COMP 1075
ST1078	STEEL COMP 1078
ST1080	STEEL COMP 1080
ST1084	STEEL COMP 1084
ST1085	STEEL COMP 1085
ST1086	STEEL COMP 1086
ST1090	STEEL COMP 1090
ST1095	STEEL COMP 1095

REPLY CODE	REPLY (MA01)
ST1109	STEEL COMP 1109
ST1110	STEEL COMP 1110
ST1111	STEEL COMP 1111
ST1112	STEEL COMP 1112
ST1113	STEEL COMP 1113
ST1116	STEEL COMP 1116
ST1117	STEEL COMP 1117
ST1118	STEEL COMP 1118
ST1119	STEEL COMP 1119
ST1120	STEEL COMP 1120
ST1132	STEEL COMP 1132
ST1137	STEEL COMP 1137
ST1139	STEEL COMP 1139
ST1140	STEEL COMP 1140
ST1141	STEEL COMP 1141
ST1144	STEEL COMP 1144
ST1145	STEEL COMP 1145
ST1146	STEEL COMP 1146
ST1151	STEEL COMP 1151
ST1212	STEEL COMP 1212
ST1213	STEEL COMP 1213
ST3140	STEEL COMP 3140
ST3310	STEEL COMP 3310
ST4027	STEEL COMP 4027
ST4130	STEEL COMP 4130
ST4135	STEEL COMP 4135
ST4137	STEEL COMP 4137
ST4140	STEEL COMP 4140
ST4142	STEEL COMP 4142
ST4145	STEEL COMP 4145
ST4150	STEEL COMP 4150
ST4340	STEEL COMP 4340
ST0104	STEEL COMP 4340H
ST4620	STEEL COMP 4620
ST0109	STEEL COMP 4620H
ST5140	STEEL COMP 5140
ST5150	STEEL COMP 5150
ST6150	STEEL COMP 6150
ST8615	STEEL COMP 8615
ST8620	STEEL COMP 8620
ST0137	STEEL COMP 8620H
ST8622	STEEL COMP 8622
ST0138	STEEL COMP 8622H
ST8625	STEEL COMP 8625
ST8630	STEEL COMP 8630
ST8640	STEEL COMP 8640
ST8642	STEEL COMP 8642
ST8645	STEEL COMP 8645

REPLY CODE	REPLY (MA01)
ST8650	STEEL COMP 8650
ST8655	STEEL COMP 8655
ST8720	STEEL COMP 8720
ST0146	STEEL COMP 8720H
ST8740	STEEL COMP 8740
ST9310	STEEL COMP 9310
ST0125	STEEL COMP 52100
STB000	STEEL CORROSION RESISTING
ST0532	STEEL UNS K24065
TTB000	TITANIUM
TTA000	TITANIUM ALLOY
ZNA000	ZINC ALLOY

Table 2 - NONDEFINITIVE SPEC/STD DATA

NONDEFINITIVE SPEC/STD DATA

REPLY CODE	REPLY (AD08)
AL	ALLOY
AN	ANNEX
AP	APPENDIX
AC	APPLICABILITY CLASS
AR	ARRANGEMENT
AS	ASSEMBLY
AB	ASSORTMENT
BX	BOX
CY	CAPACITY
CA	CASE
CT	CATEGORY
CL	CLASS
CE	CODE
CR	COLOR
CC	COMBINATION CODE
CN	COMPONENT
CP	COMPOSITION
CM	COMPOUND
CD	CONDITION
CS	CONSTRUCTION
DE	DESIGN
DG	DESIGNATOR
DW	DRAWING NUMBER
EG	EDGE
EN	END
FY	FAMILY
FG	FIGURE
FN	FINISH
FM	FORM
FA	FORMULA

REPLY CODE	REPLY (AD08)
GR	GRADE
GP	GROUP
BA	IMAGE COLOR
NS	INSERT
TM	ITEM
KD	KIND
KT	KIT
LG	LENGTH
LT	LIMIT
MK	MARK
AA	MARKER
ML	MATERIAL
BB	MAXIMUM DENSITY
MH	MESH
ME	METHOD
BC	MINIMUM DENSITY
MD	MODEL
MT	MOUNTING
NR	NUMBER
PT	PART
PN	PATTERN
PC	PHYSICAL CONDITION
PS	PIECE
PL	PLAN
PR	POINT
QA	QUALITY
RN	RANGE
RT	RATING
RF	REFERENCE NUMBER
SC	SCHEDULE
SB	SECTION
SL	SELECTION
SE	SERIES
SV	SERVICE
SX	SET
SA	SHADE
SH	SHAPE
SG	SHEET
SZ	SIZE
PZ	SPECIES
SQ	SPECIFICATION SHEET
SD	SPEED
ST	STYLE
SS	SUBCLASS
SF	SUBFORM
SP	SUBTYPE
SN	SURFACE CONDITION
SY	SYMBOL

REPLY CODE	REPLY (AD08)
SM	SYSTEM
TB	TABLE
TN	TANNAGE
TP	TEMPER
TX	TEXTURE
TK	THICKNESS
TT	TREATMENT
TR	TRIM
TY	TYPE
YN	UNIT
VA	VARIETY
WT	WEIGHT
WD	WIDTH

Reference Drawing Groups

REFERENCE DRAWING GROUP A Tables
END STYLES

INDEX OF MASTER REQUIREMENT CODES

Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., AMCMJAA1.375*; AMCMJLA24.5*; AMCMJAB31.374$$JAC31.390*)

NOTE FOR MRCS AMDX, AMGS, AMEB, AND AMHD: FOR ITEMS WITH MULTIPLE HOLES WITH THE SAME DIAMETER/DEPTH, ENTER ONE REPLY TO MRCS AMDX, AMGS, AMEB, AND AMHD. IF THE DIAMETER/DEPTH DIFFER USE AND ($$) CODING, ENTERING THE DIMENSION OF THE HOLE NEAREST THE END FIRST.(e.g., AMEBJAA0.125*; AMEBJAB0.120$$JAC0.130*)

DO NOT REPLY TO MRCS AMEB/AMHD IF HOLES ARE THRU HOLES. IF A COMBINATION OF THRU HOLES AND NOT THRU HOLES, REPLY ONLY TO THE NOT THRU HOLES.

THE AFFECTED STYLES ARE 25, 26, 31, 39, 45, 50, 51, 56, 62, 63, 72, 75, 77, 78, 82, 85, 86, 87, 88, 90, 92, and 93.

ENTER ALL MEASUREMENTS TO THE NEAREST FOUR DECIMAL PLACE FOR THE FOLLOWING MRCS:

AMCR, AMCW, AAHG, AAHH, AMCZ, AMDL, AMDN, AMDP, AMDS, AMDX, AMEL, AMFG, CSRG, CSSW, CWBK, AMFL, AMFN, AAHW, AAHX, AMFR, AMFZ, AMGB, AMGC, AMGF, AMGS, AMHL, AMJA, CTFK, CTLC, AND CXDD. (e.g., AMDNJAA1.3750*)

Table 1

REPLY CODE	REPLY (AA05)
A	INCHES
L	MILLIMETERS

Table 2

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

MRC	Mode Code	Name of Dimension

MRC	Mode Code	Name of Dimension
AAHG	J	FIRST END GROOVE WIDTH
AAHH	J	FIRST END GROOVE DIAMETER
ACKY	J	FIRST END WIDTH ACROSS FLATS
AKTM	J	FIRST END SLOT WIDTH
AMCM	J	FIRST END DISTANCE FROM END TO FLAT
AMCR	J	FIRST END TAPER MAJOR DIAMETER
AMCS	J	FIRST END TAPER LENGTH
AMCW	J	FIRST END FLAT DEPTH
AMCX	J	FIRST END FLAT LENGTH
AMCY	J	FIRST END DISTANCE FROM END TO GROOVE
AMCZ	J	FIRST END KEYWAY WIDTH
AMDE	J	FIRST END EXTERNAL KEYWAY LENGTH
AMDG	J	FIRST END KEYWAY DEPTH
AMDH	J	FIRST END DISTANCE FROM KEYWAY CENTER TO END
AMDJ	J	FIRST END TONGUE THICKNESS
AMDK	J	FIRST END TONGUE WIDTH
AMDL	J	FIRST END DIAMETER
AMDM	J	FIRST END SPLINE LENGTH
AMDN	J	FIRST END SPLINE MINOR DIAMETER
AMDP	J	FIRST END SPLINE MAJOR DIAMETER
AMDS	J	FIRST END PITCH DIAMETER
AMDT	J	FIRST END DISTANCE ACROSS CORNERS
AMDW	J	FIRST END SLOT DEPTH
AMDX	J	FIRST END HOLE DIAMETER
AMDZ	J	FIRST END DISTANCE FROM HOLE CENTER TO END
AMEA	J	FIRST END EXTERNAL THREAD LENGTH
AMEB	J	FIRST END HOLE DEPTH
AMEJ	J	FIRST END BEARING SEAT LENGTH
AMEL	J	FIRST END BEARING SEAT DIAMETER
AMEP	J	FIRST END DISTANCE FROM BEARING SEAT TO END
AMER	J	FIRST END INTERNAL THREAD LENGTH
AMES	J	FIRST END DISTANCE BETWEEN KEYWAY CENTERS
AMFB	J	FIRST END DISTANCE BETWEEN HOLE CENTERS
AMFC	J	FIRST END DISTANCE BETWEEN FIRST AND SECOND GROOVE CENTERS
AMFD	J	FIRST END DISTANCE BETWEEN SECOND AND THIRD GROOVE CENTERS
AMFG	J	FIRST END GROOVED FLAT LENGTH
AMFH	J	FIRST END GROOVED FLAT DEPTH
CSQZ	J	FIRST END STEP LENGTH
CSRG	J	FIRST END KEYWAY MAJOR WIDTH
CSSW	J	FIRST END KEYWAY MINOR WIDTH
AAHW	J	SECOND END GROOVE WIDTH

MRC	Mode Code	Name of Dimension
AAHX	J	SECOND END GROOVE DIAMETER
ACMD	J	SECOND END WIDTH ACROSS FLATS
AKTN	J	SECOND END SLOT WIDTH
AMFJ	J	SECOND END DISTANCE FROM END TO FLAT
AMFL	J	SECOND END TAPER MAJOR DIAMETER
AMFM	J	SECOND END TAPER LENGTH
AMFN	J	SECOND END FLAT DEPTH
AMFP	J	SECOND END FLAT LENGTH
AMFQ	J	SECOND END DISTANCE FROM END TO GROOVE
AMFR	J	SECOND END KEYWAY WIDTH
AMFS	J	SECOND END EXTERNAL KEYWAY LENGTH
AMFT	J	SECOND END KEYWAY DEPTH
AMFW	J	SECOND END DISTANCE FROM KEYWAY CENTER TO END
AMFX	J	SECOND END TONGUE THICKNESS
AMFY	J	SECOND END TONGUE WIDTH
AMFZ	J	SECOND END DIAMETER
AMGA	J	SECOND END SPLINE LENGTH
AMGB	J	SECOND END SPLINE MINOR DIAMETER
AMGC	J	SECOND END SPLINE MAJOR DIAMETER
AMGF	J	SECOND END PITCH DIAMETER
AMGH	J	SECOND END DISTANCE ACROSS CORNERS
AMGR	J	SECOND END SLOT DEPTH
AMGS	J	SECOND END HOLE DIAMETER
AMGT	J	SECOND END DISTANCE FROM HOLE CENTER TO END
AMHA	J	SECOND END EXTERNAL THREAD LENGTH
AMHD	J	SECOND END HOLE DEPTH
AMHK	J	SECOND END BEARING SEAT LENGTH
AMHL	J	SECOND END BEARING SEAT DIAMETER
AMHM	J	SECOND END DISTANCE FROM BEARING SEAT TO END
AMHP	J	SECOND END INTERNAL THREAD LENGTH
AMHQ	J	SECOND END DISTANCE BETWEEN KEYWAY CENTERS
AMHS	J	SECOND END DISTANCE BETWEEN HOLE CENTERS
AMHT	J	SECOND END DISTANCE BETWEEN FIRST AND SECOND GROOVE CENTERS
AMHW	J	SECOND END DISTANCE BETWEEN SECOND AND THIRD GROOVE CENTERS
AMJA	J	SECOND END GROOVED FLAT LENGTH
AMJB	J	SECOND END GROOVED FLAT DEPTH
CTBM	J	SECOND END STEP LENGTH
CTFK	J	SECOND END KEYWAY MAJOR WIDTH
CTLC	J	SECOND END KEYWAY MINOR WIDTH

Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., CWBKJQ0.2500*; CWBKJS6.4*)

REPLY CODE	REPLY (AB39)
Q	PER FOOT IN INCHES
S	PER METER IN MILLIMETERS

MRC	Mode Code	Name of Dimension
CWBK	J	FIRST END TAPER
CXDD	J	SECOND END TAPER

Enter the applicable Reply Codes from Tables 1 and 2 below, followed by the numeric value. (e.g., AMFEJDA45.0*; AMFEJRA4.5*; AMFEJDB42.0$$JDC48.0*)

REPLY CODE	REPLY (AF98)
D	DEGREES
R	RADIANS

REPLY CODE	REPLY (AC20)
A	NOMINAL
B	MINIMUM
C	MAXIMUM

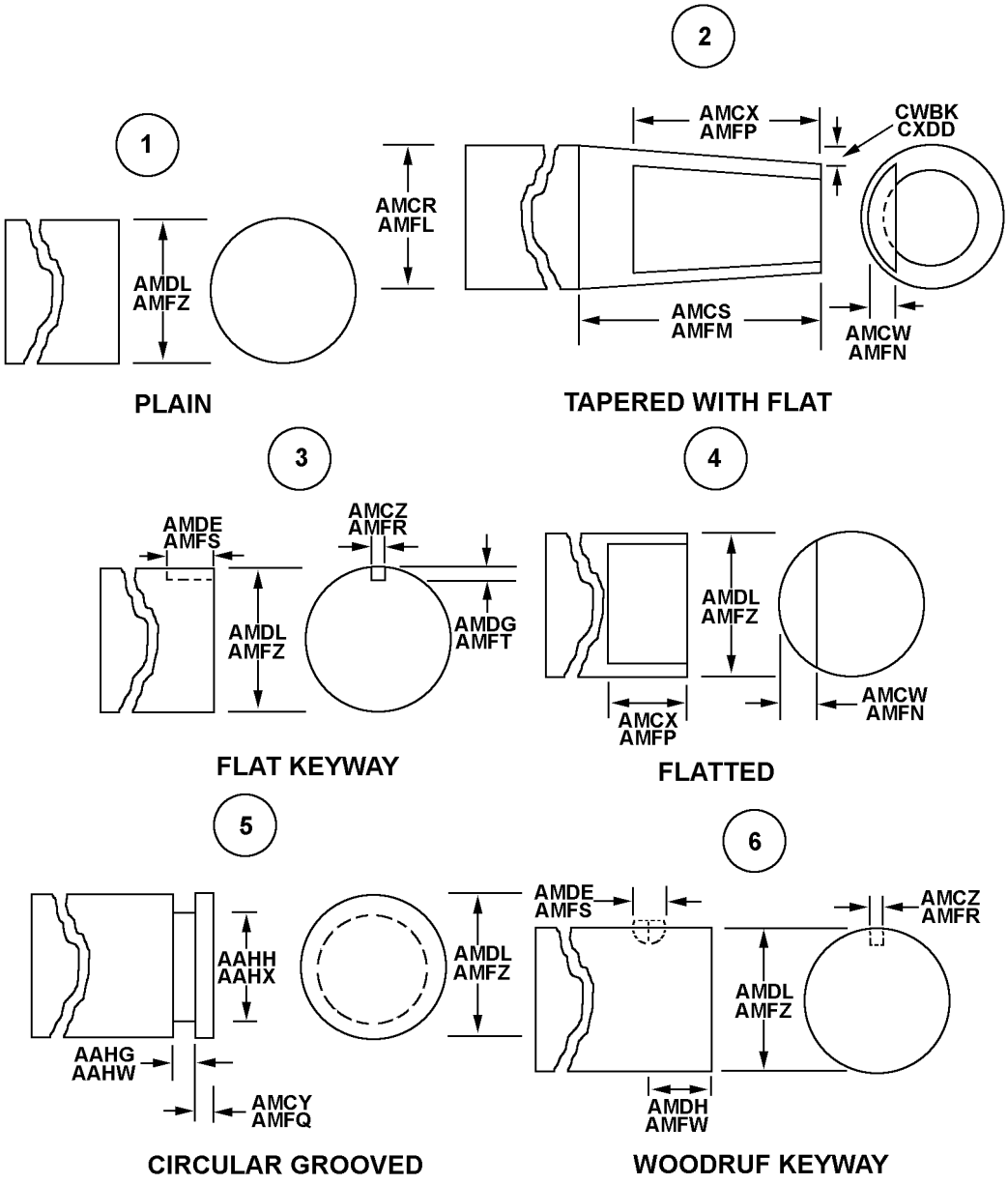
MRC	Mode Code	Name of Dimension
AMDR	J	FIRST END PRESSURE ANGLE
AMFE	J	FIRST END ANGLE BETWEEN KEYWAYS
CWFJ	J	FIRST END ANGLE BETWEEN HOLES
CWLQ	J	FIRST END ANGLE BETWEEN FLATS
AMGE	J	SECOND END PRESSURE ANGLE
AMHY	J	SECOND END ANGLE BETWEEN KEYWAYS
AMHZ	J	SECOND END ANGLE BETWEEN HOLES
CXYR	J	SECOND END ANGLE BETWEEN FLATS

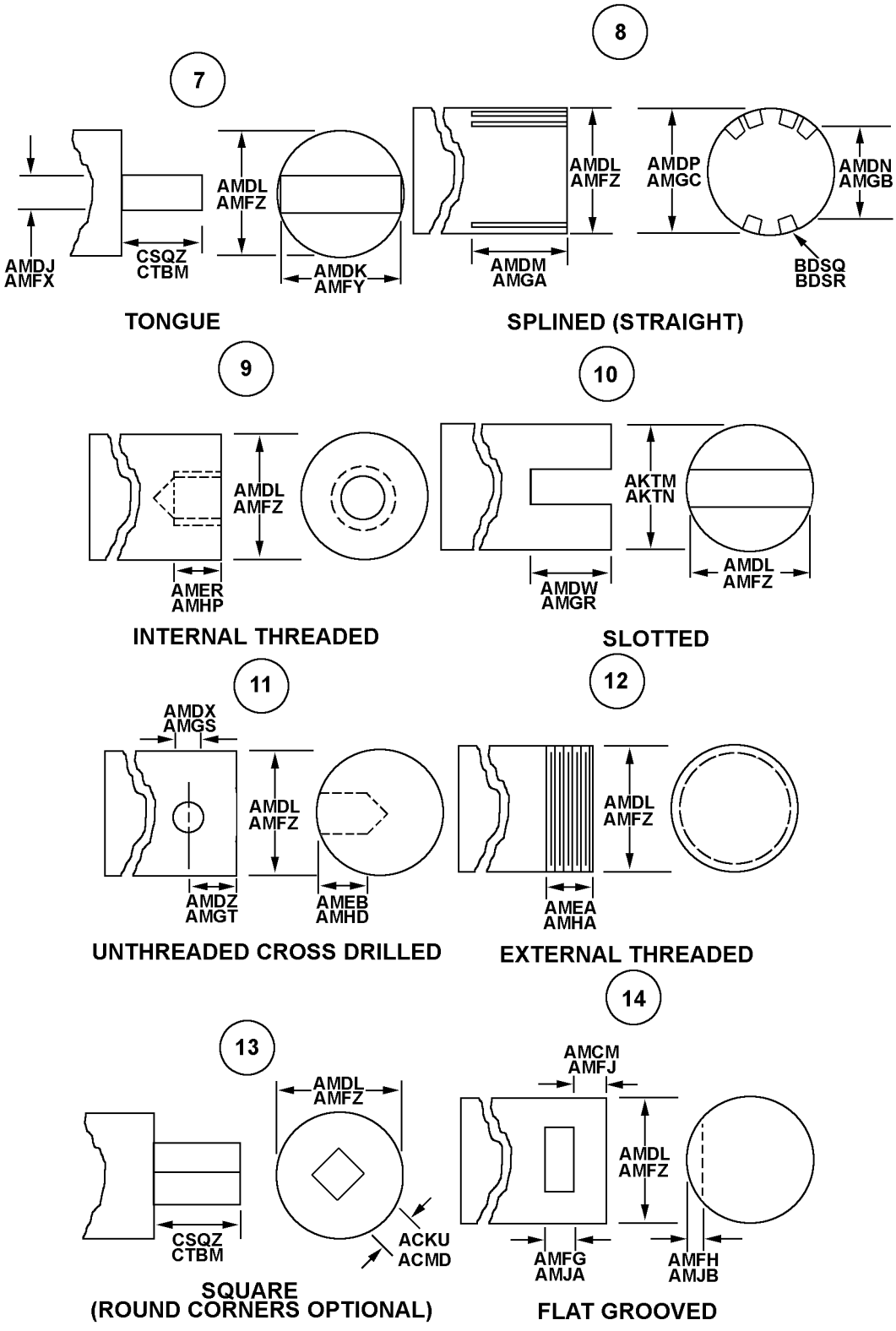
Enter the quantity. (e.g., BDSQA15*)

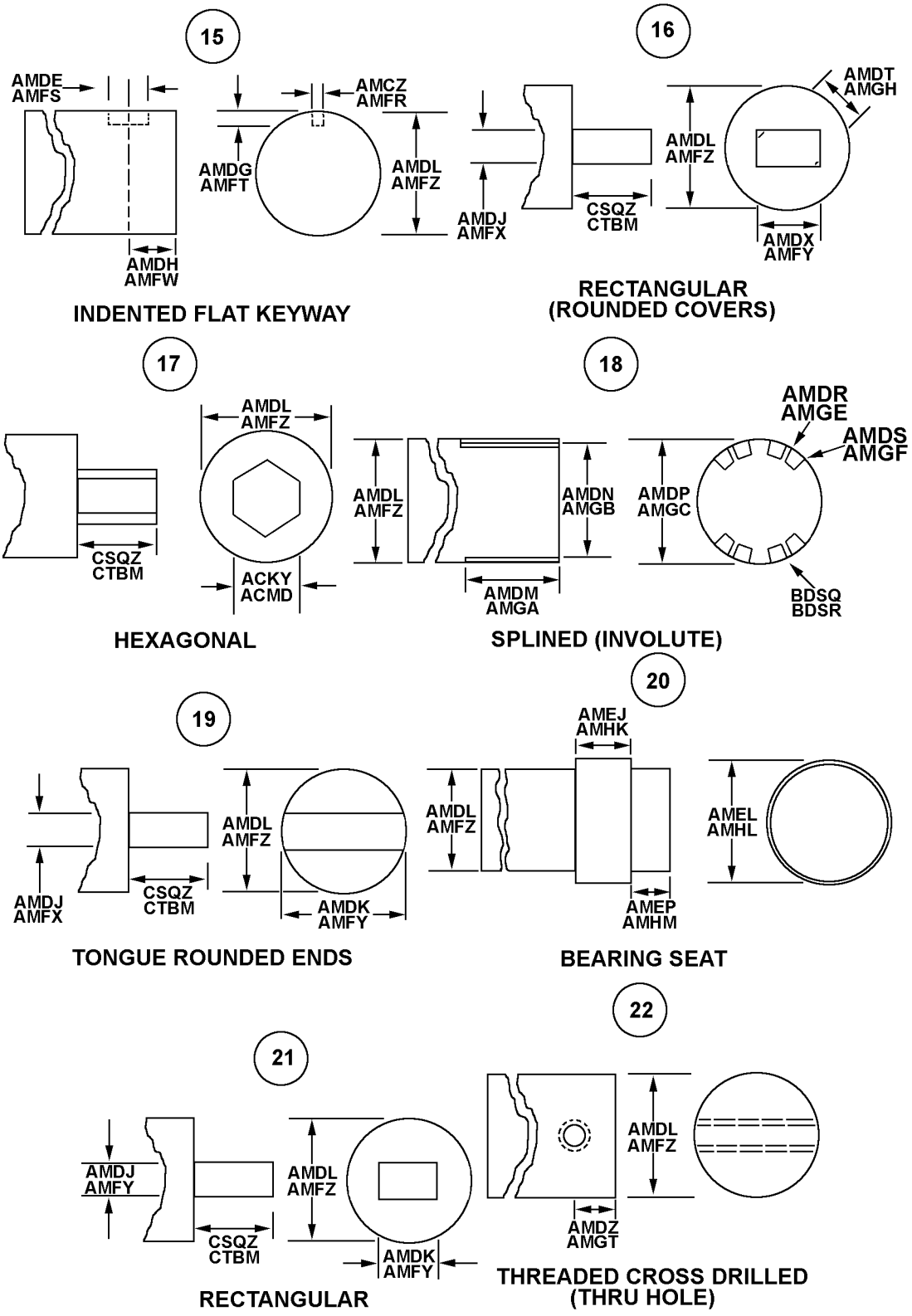
MRC	Mode Code	Name of Dimension
BDSQ	A	FIRST END SPLINE QUANTITY
BDSR	A	SECOND END SPLINE QUANTITY

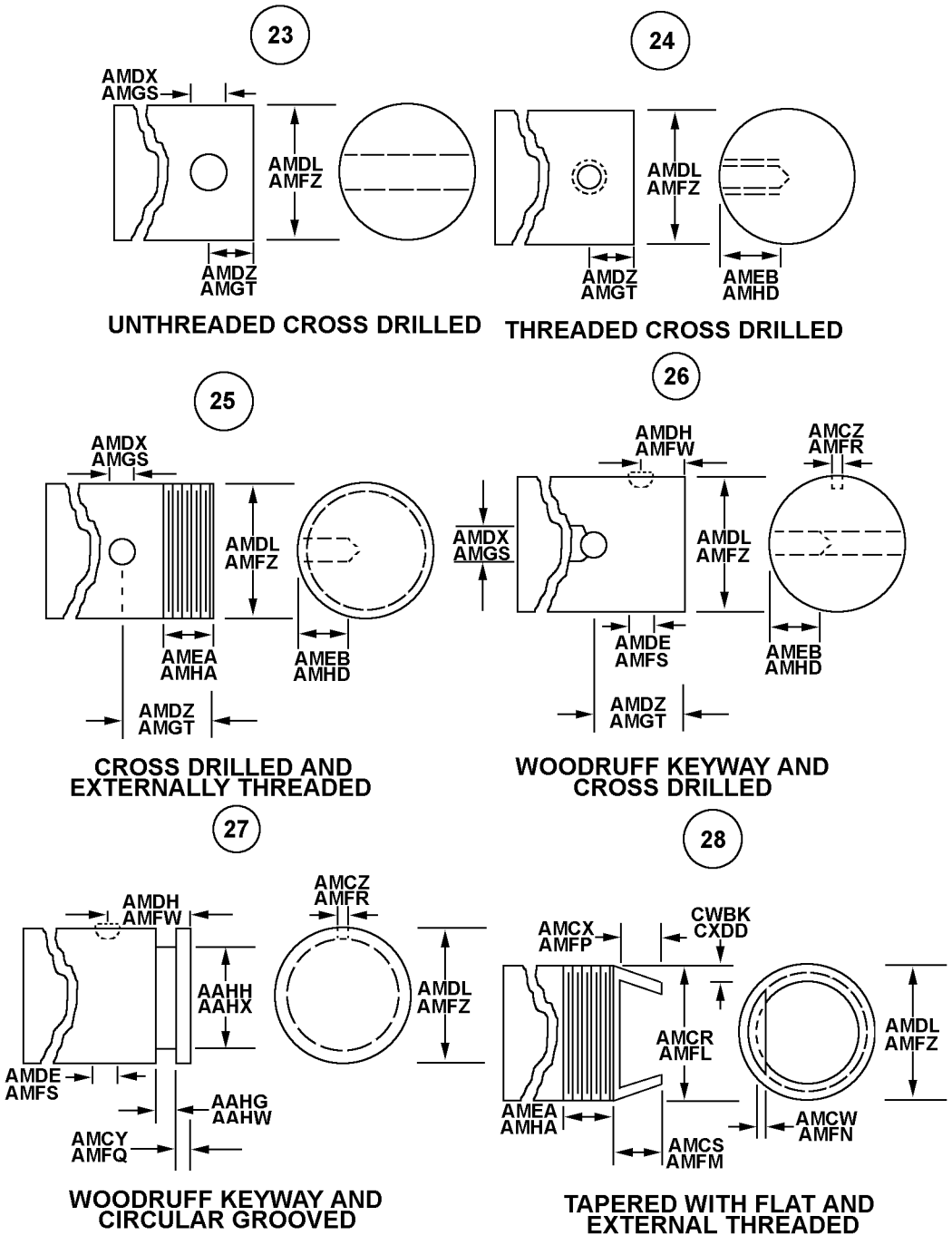
REFERENCE DRAWING GROUP A

END STYLES

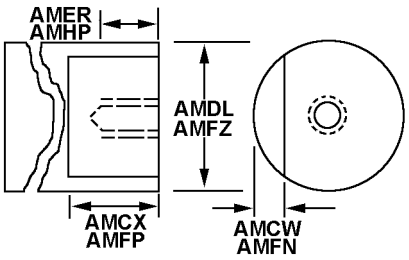



7
AMDJ
AMFX
CSQZ
CTBM
AMDL
AMFZ
AMDK
AMFY
TONGUE
8
AMDL
AMFZ
AMDM
AMGA
AMDP
AMGC
AMDN
AMGB
BDSQ
BDSR
SPLINED (STRAIGHT)
9
AMDL
AMFZ
AMER
AMHP
INTERNAL THREADED
10
AKTM
AKTN
AMDW
AMGR
AMDL
AMFZ
SLOTTED
11
AMDX
AMGS
AMDL
AMFZ
AMDZ
AMGT
AMEB
AMHD
UNTHREADED CROSS DRILLED
12
AMDL
AMFZ
AMEA
AMHA
EXTERNAL THREADED
13
AMDL
AMFZ
CSQZ
CTBM
ACKU
ACMD
SQUARE
(ROUND CORNERS OPTIONAL)
14
AMCM
AMFJ
AMDL
AMFZ
AMFG
AMJA
AMFH
AMJB
FLAT GROOVED


15
AMDE
AMFS
AMCZ
AMFR
AMDG
AMFT
AMDL
AMFZ
AMDH
AMFW
INDENTED FLAT KEYWAY
16
AMDT
AMGH
AMDL
AMFZ
AMDJ
AMFX
CSQZ
CTBM
AMDX
AMFY
RECTANGULAR
(ROUNDED COVERS)
17
AMDL
AMFZ
CSQZ
CTBM
ACKY
ACMD
HEXAGONAL
18
AMDR
AMGE
AMDS
AMGF
AMDL
AMFZ
AMDN
AMGB
AMDP
AMGC
AMDM
AMGA
BDSQ
BDSR
SPLINED (INVOLUTE)
19
AMDJ
AMFX
CSQZ
CTBM
AMDL
AMFZ
AMDK
AMFY
TONGUE ROUNDED ENDS
20
AMEJ
AMHK
AMDL
AMFZ
AMEL
AMHL
AMEP
AMHM
BEARING SEAT
21
AMDJ
AMFY
CSQZ
CTBM
AMDL
AMFZ
AMDK
AMFY
RECTANGULAR
22
AMDL
AMFZ
AMDZ
AMGT
THREADED CROSS DRILLED
(THRU HOLE)

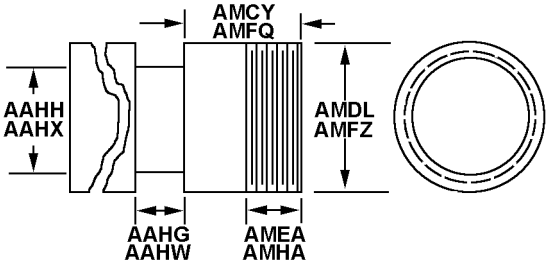

23
AMDX
AMGS
AMDL
AMFZ
AMDZ
AMGT
UNTHREADED CROSS DRILLED
24
AMDL
AMFZ
AMDZ
AMGT
AMEB
AMHD
THREADED CROSS DRILLED
25
AMDX
AMGS
AMDL
AMFZ
AMEA
AMHA
AMEB
AMHD
AMDZ
AMGT
CROSS DRILLED AND
EXTERNALLY THREADED
26
AMDH
AMFW
AMCZ
AMFR
AMDX
AMGS
AMDL
AMFZ
AMDE
AMFS
AMEB
AMHD
AMDZ
AMGT
WOODRUFF KEYWAY AND
CROSS DRILLED
27
AMDH
AMFW
AMCZ
AMFR
AAHH
AAHX
AMDL
AMFZ
AMDE
AMFS
AAHG
AAHW
AMCY
AMFQ
WOODRUFF KEYWAY AND
CIRCULAR GROOVED
28
AMCX
AMFP
CWBK
CXDD
AMCR
AMFL
AMDL
AMFZ
AMEA
AMHA
AMCS
AMFM
AMCW
AMFN
TAPERED WITH FLAT AND
EXTERNAL THREADED

29



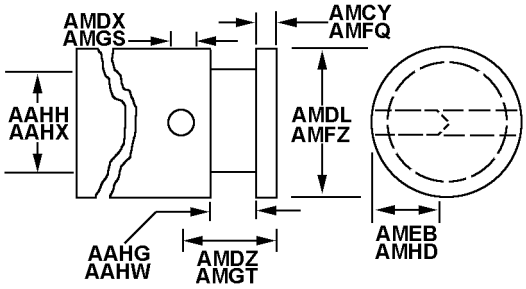
FLATTED AND
INTERNALLY THREADED

30



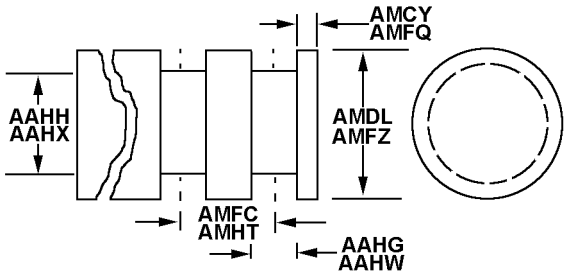
CIRCULAR GROOVED AND
EXTERNALLY THREADED

31



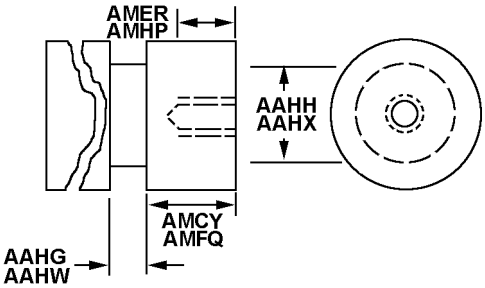
CROSS DRILLED AND
CIRCULAR GROOVED

32



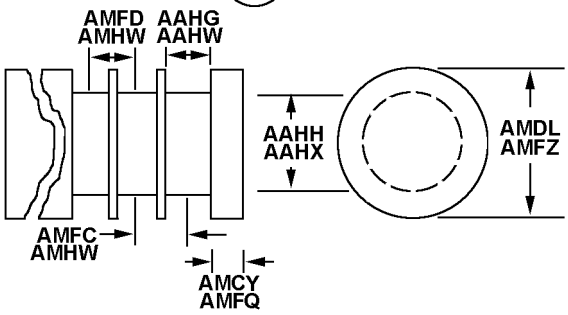
TWO CIRCULAR GROOVES

33

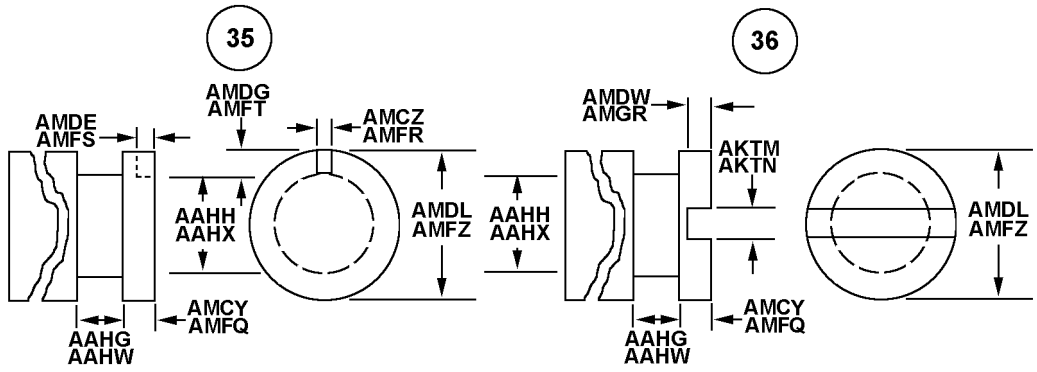


CIRCULAR GROOVED
AND INTERNALLY THREADED

34

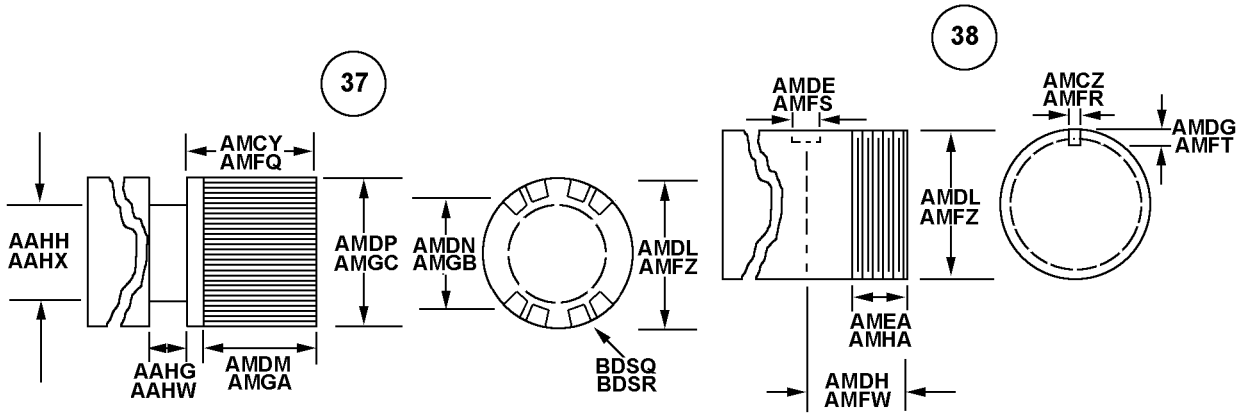


THREE CIRCULAR GROOVES



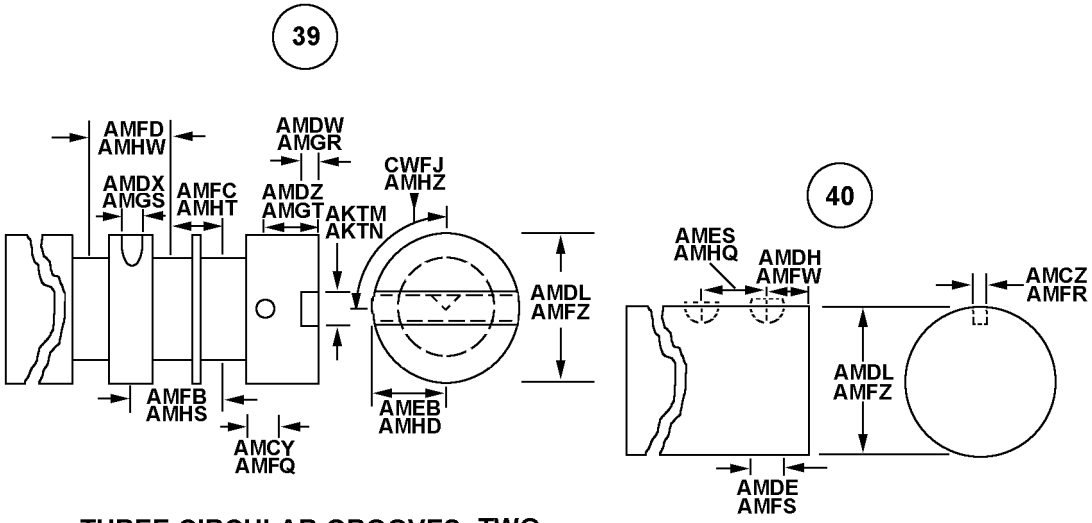
CIRCULAR GROOVED AND FLAT KEYWAY

CIRCULAR GROOVED AND SLOTTED



CIRCULAR GROOVED AND SPLINED (STRAIGHT)

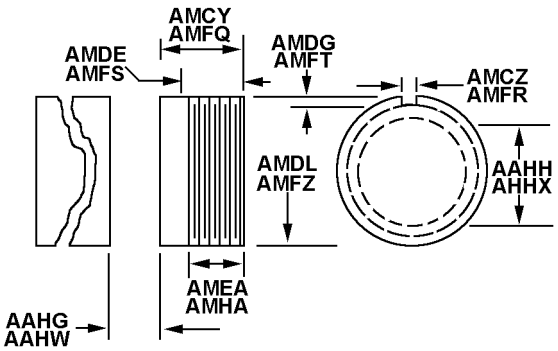
EXTERNALLY THREADED AND INDENTED FLAT KEYWAY



THREE CIRCULAR GROOVES, TWO CROSS DRILLED HOLES AND SLOTTED

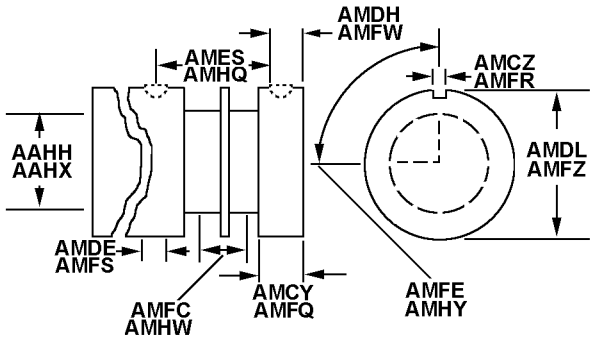
TWO WOODRUFF KEYWAYS

41



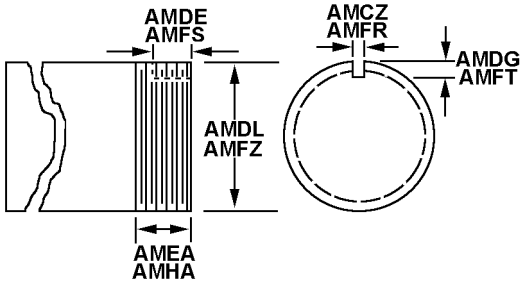
CIRCULAR GROOVED FLAT
KEYWAY AND EXTERNALLY THREADED

42



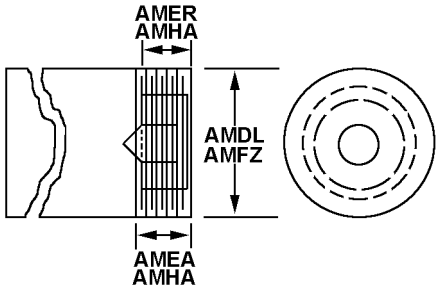
TWO CIRCULAR GROOVES AND
TWO WOODRUFF KEYWAYS

43



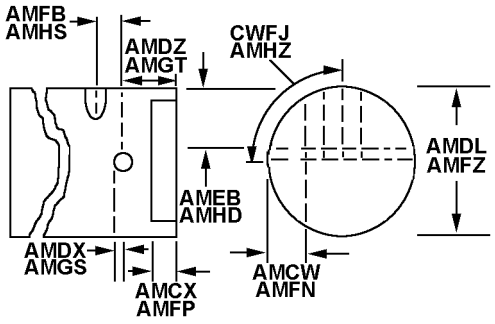
EXTERNALLY THREADED
AND FLAT KEYWAY

44

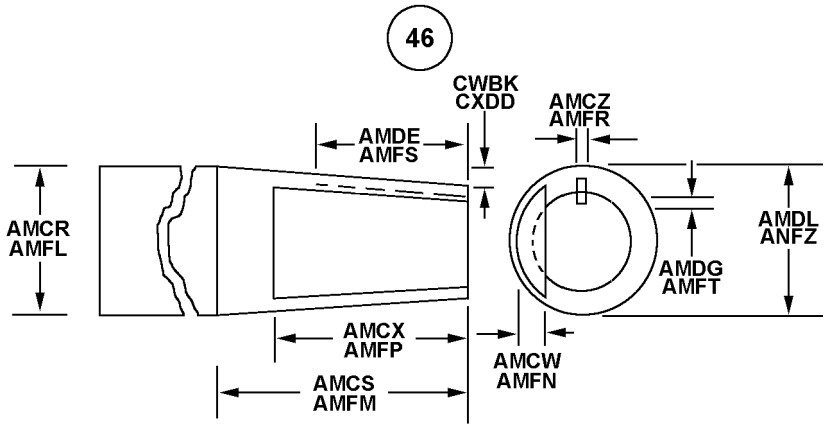


EXTERNALLY AND
INTERNALLY THREADED

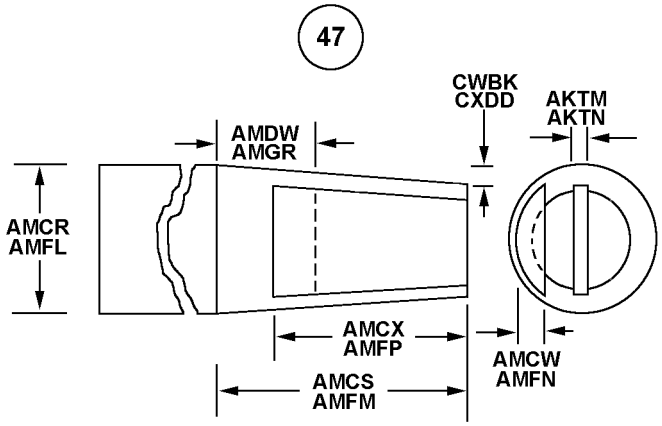
45



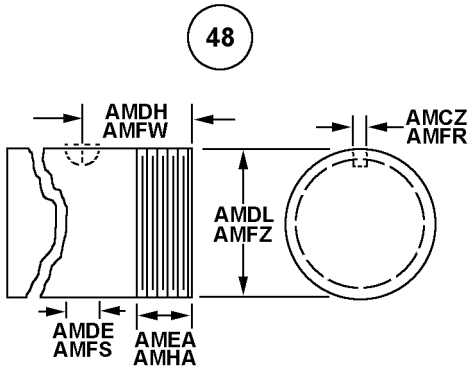
FLATTED AND TWO
CROSS DRILLED HOLES



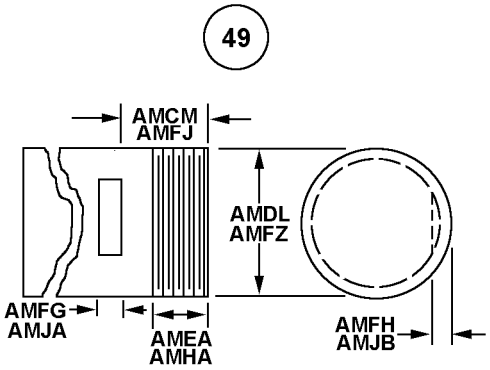
TAPERED WITH FLAT
AND FLAT KEYWAY



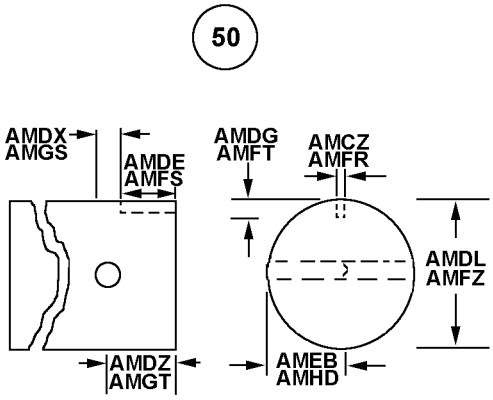
TAPERED WITH FLAT
AND SLOTTED



EXTERNALLY THREADED AND
WOODRUFF KEYWAY

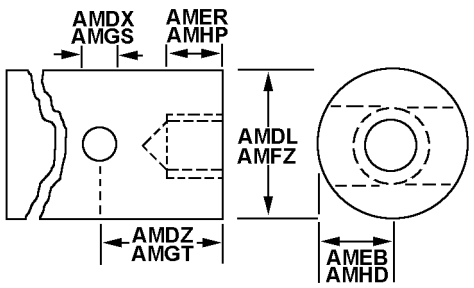


FLAT GROOVED AND
EXTERNALLY THREADED



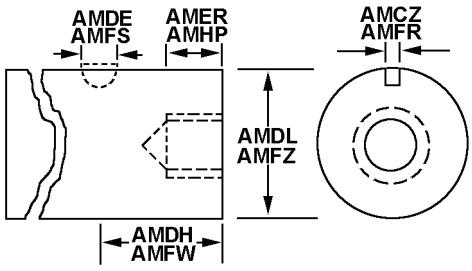
FLAT KEYWAY AND
CROSS DRILLED HOLE

51



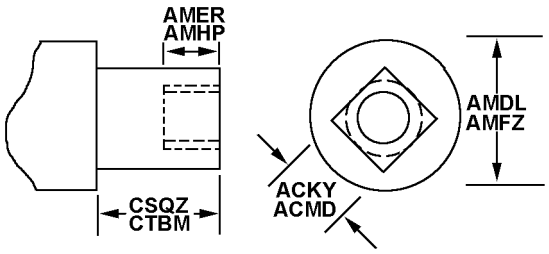
CROSS DRILLED HOLE AND INTERNALLY THREADED

52



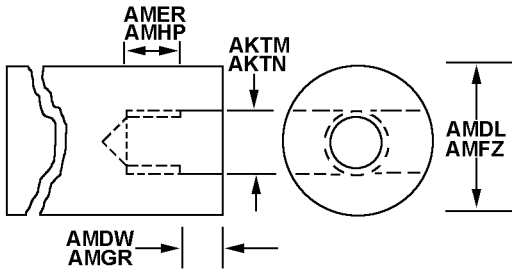
WOODRUFF KEYWAY AND INTERNALLY THREADED

53



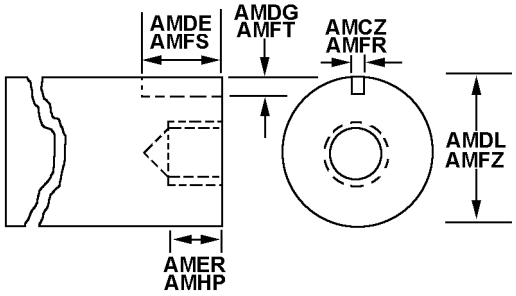
SQUARE AND INTERNALLY THREADED

54



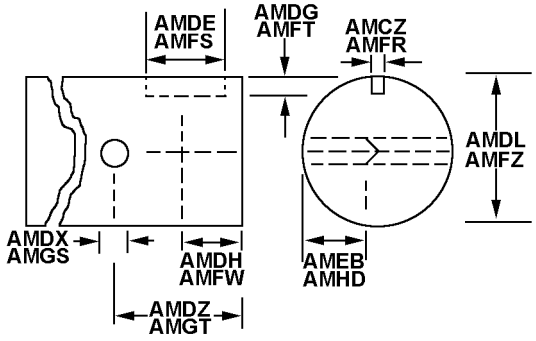
SLOTTED AND INTERNALLY THREADED

55

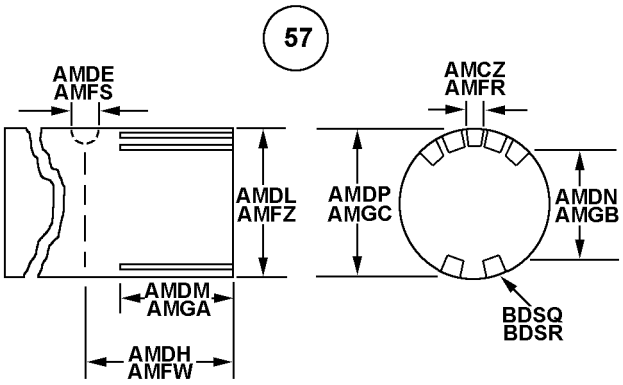


FLAT KEYWAYS AND INTERNALLY THREADED

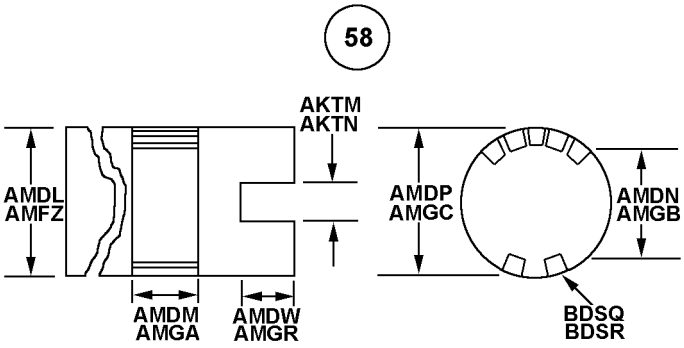
56



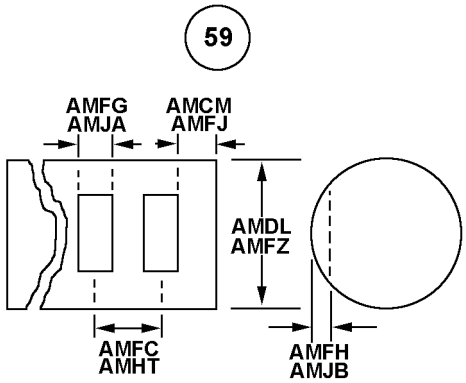
INDENTED FLAT KEYWAY AND CROSS DRILLED HOLE



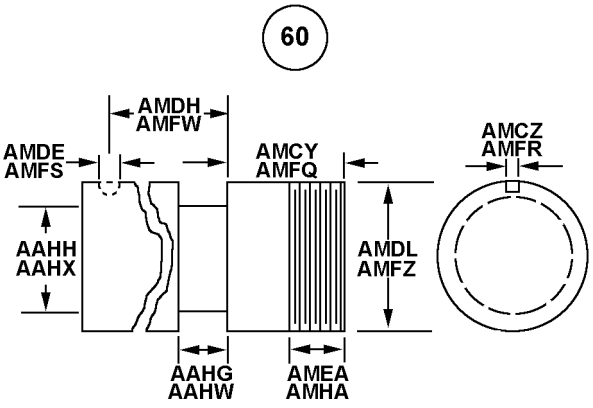
STRAIGHT SPLINED AND
WOODRUFF KEYWAY



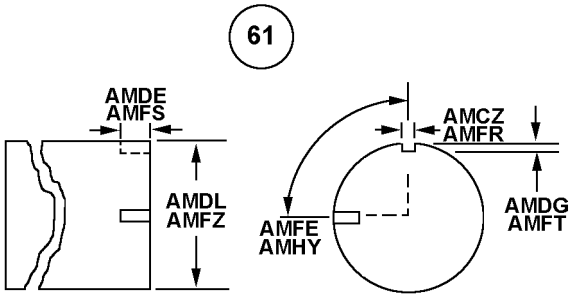
STRAIGHT SPLINED
AND SLOTTED



TWO FLAT GROOVES

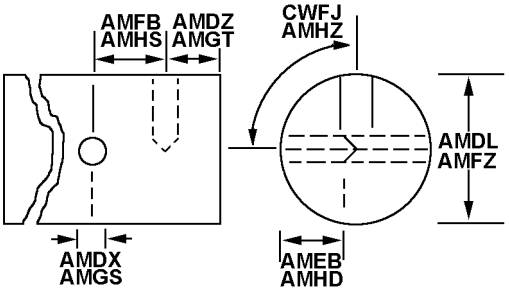


CIRCULAR GROOVED WOODRUFF KEYWAY
AND EXTERNALLY THREADED



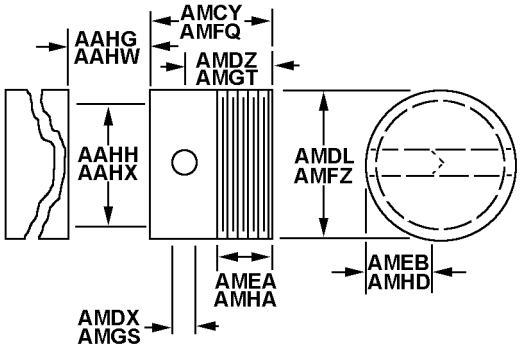
TWO FLAT KEYWAYS

62



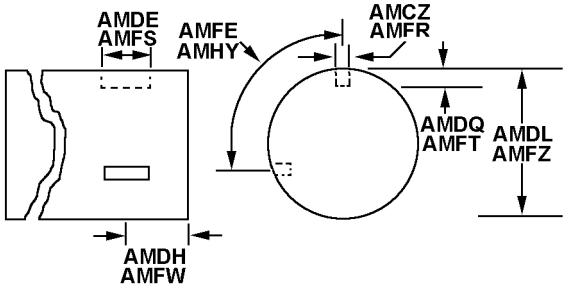
TWO CROSS DRILLED HOLES

63



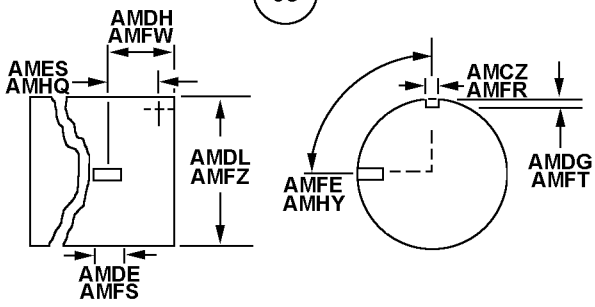
CIRCULAR GROOVED, CROSS DRILLED HOLE, AND EXTERNALLY THREADED

64



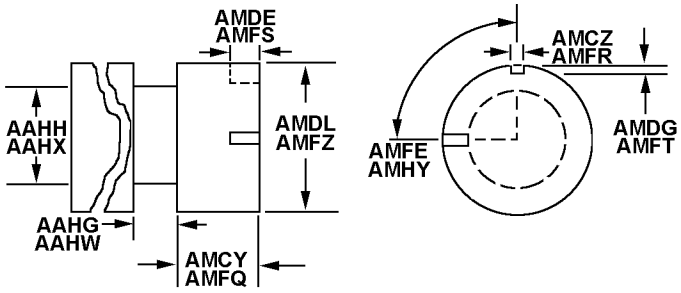
TWO INDENTED FLAT KEYWAYS

65



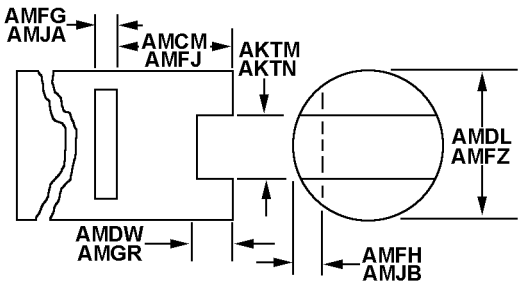
TWO FLAT KEYWAYS

66



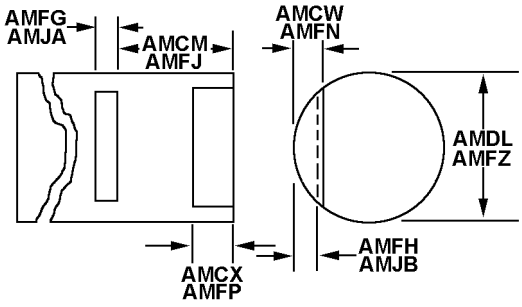
CIRCULAR GROOVED AND TWO FLAT KEYWAYS

67



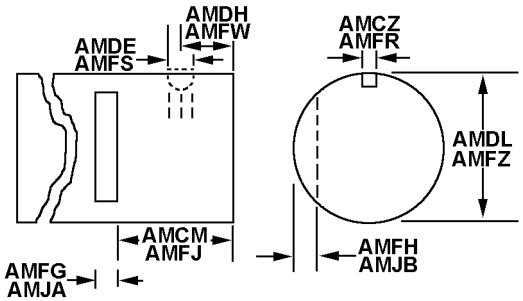
SLOTTED AND
FLAT GROOVED

68



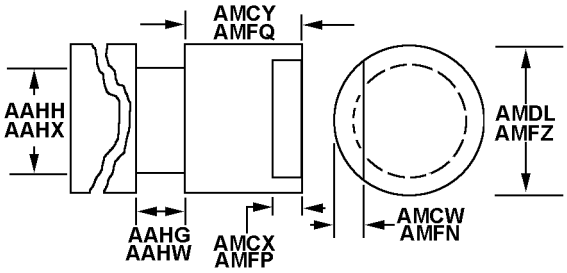
FLAT GROOVED
AND FLATTED

69



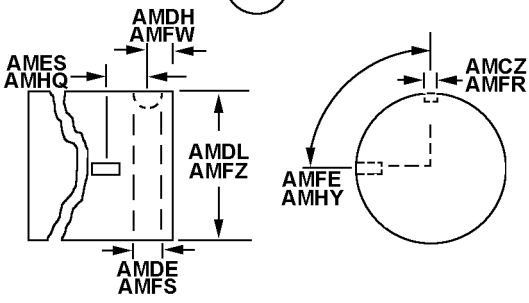
FLAT GROOVED AND
WOODRUFF KEYWAY

70



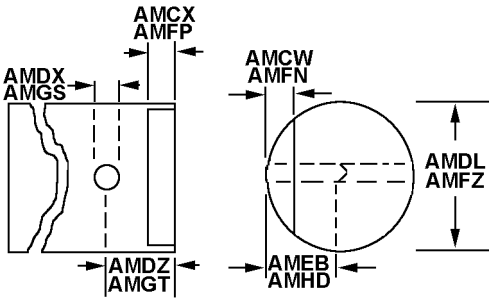
CIRCULAR GROOVED AND FLATTED

71



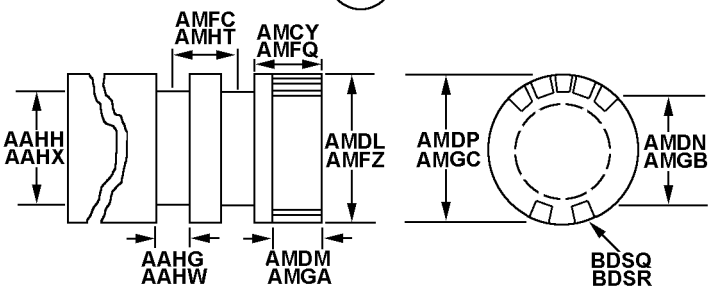
TWO WOODRFUFF KEYWAYS

72



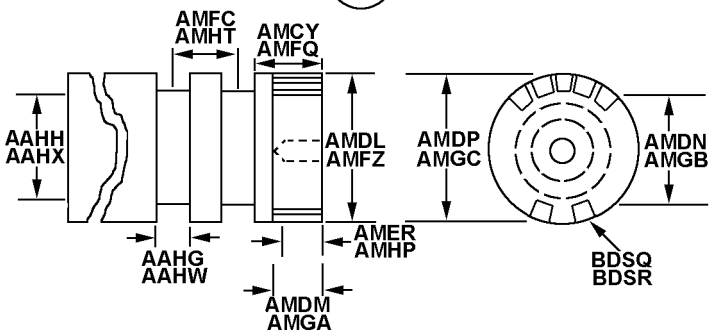
CROSS DRILLED AND FLATTED

73



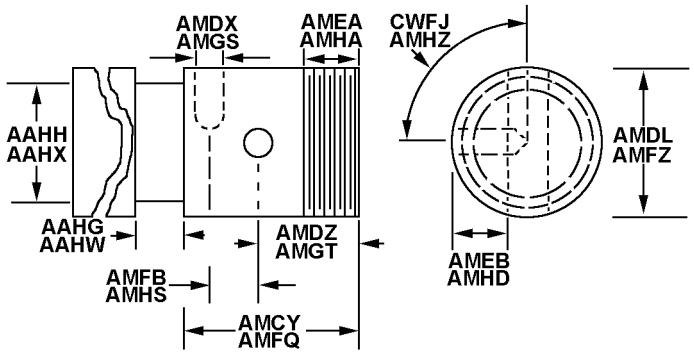
TWO CIRCULAR GROOVES AND SPLINED (STRAIGHT)

74



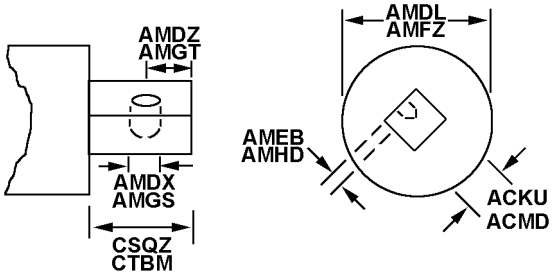
TWO CIRCULAR GROOVES, SPLINED (STRAIGHT) AND INTERNALLY THREADED

75



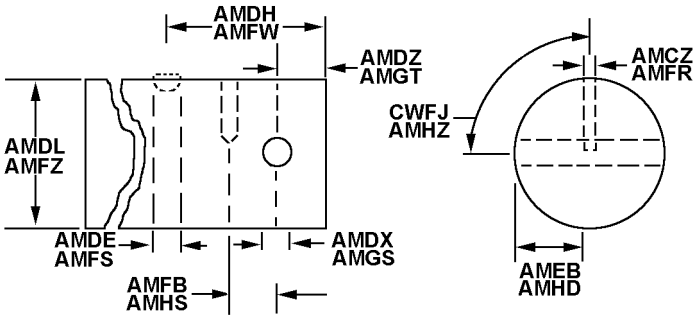
CIRCULAR GROOVE, TWO CROSS DRILLED HOLES AND EXTERNALLY THREADED

76



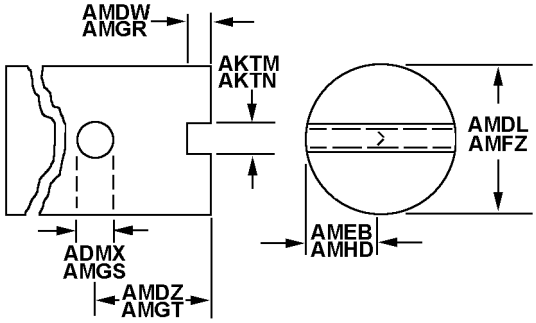
SQUARE AND CROSS DRILLED HOLE

77



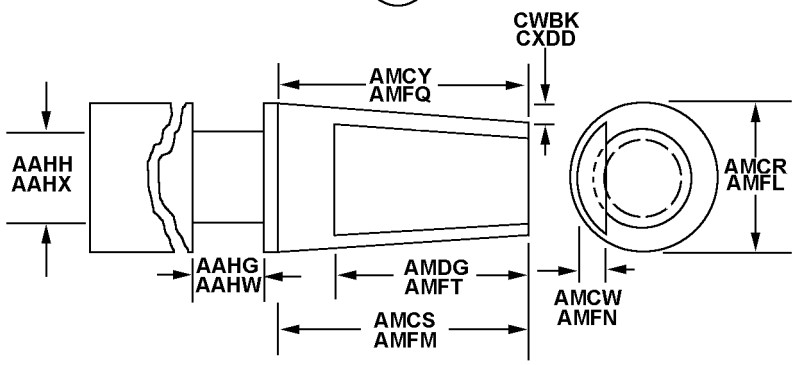
TWO CROSS DRILLED HOLES AND WOODRUFF KEYWAY

78



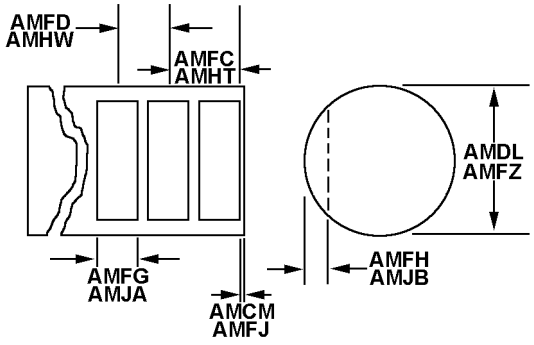
CROSS DRILLED HOLE AND SLOTTED

79



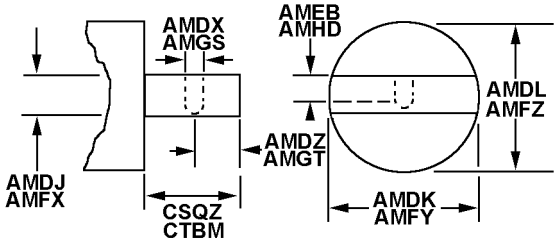
CIRCULAR GROOVE, FLAT AND TAPERED

81



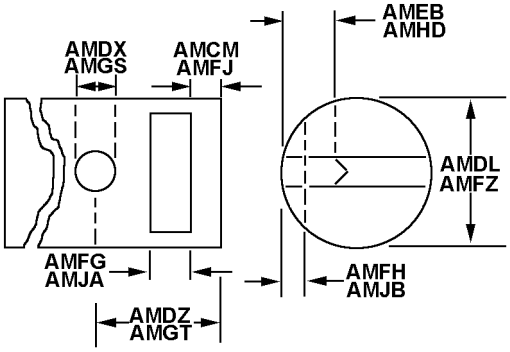
THREE FLAT GROOVES

80



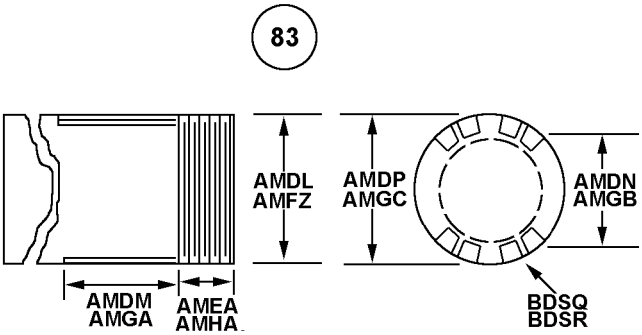
TONGUE AND CROSS DRILLED HOLE

82



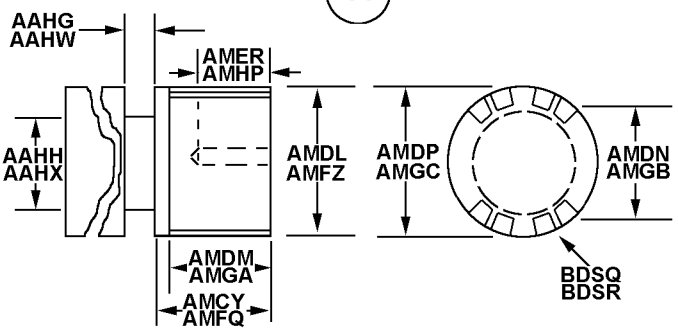
FLAT GROOVE AND CROSS DRILLED HOLE

83



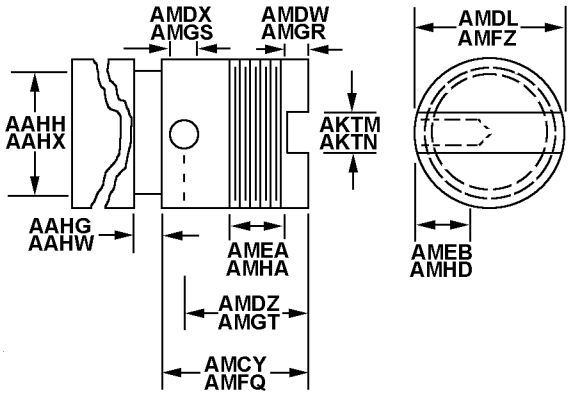
STRAIGHT SPLINED AND EXTERNALLY THREADED

84



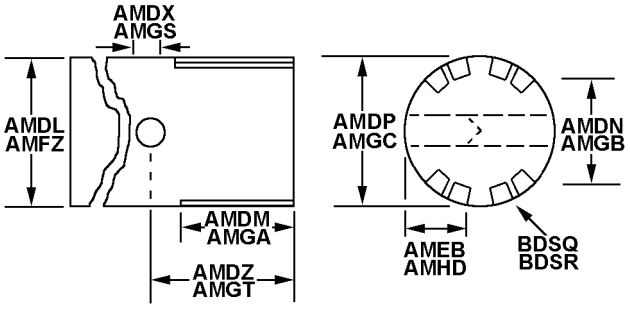
CIRCULAR GROOVED, SPLINED (STRAIGHT) AND EXTERNALLY THREADED

85



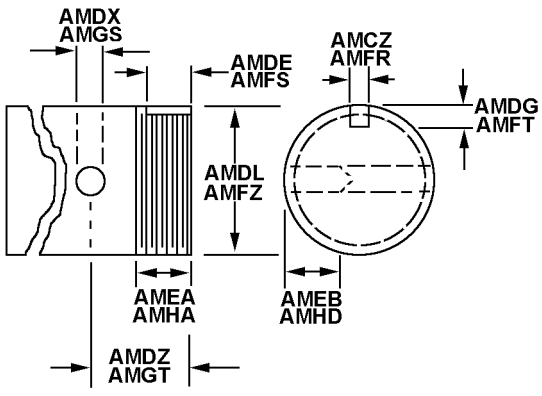
CIRCULAR GROOVED, CROSS DRILLED HOLE, EXTERNALLY THREADED AND SLOTTED

86



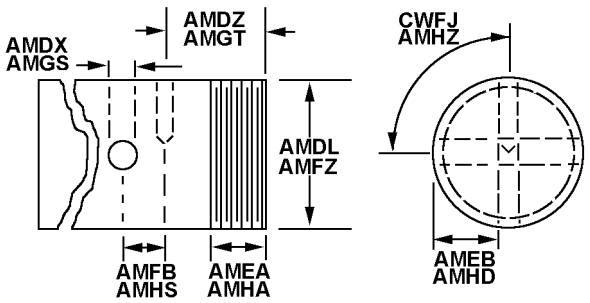
CROSS DRILLED HOLE AND SPLINED (STRAIGHT)

87



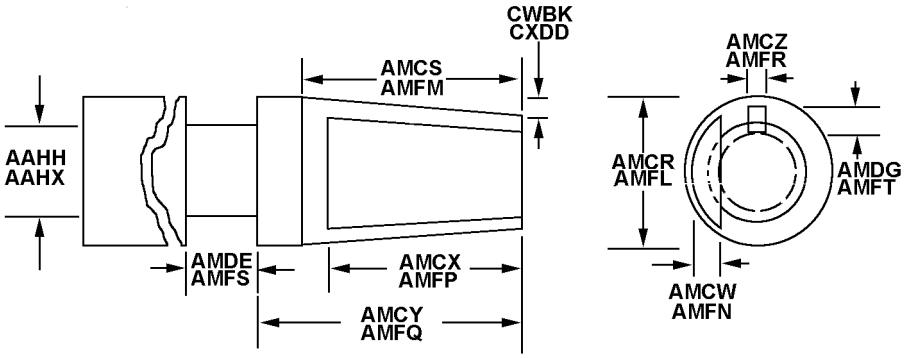
CROSS DRILLED HOLE, EXTERNALLY THREADED AND FLAT KEYWAY

88



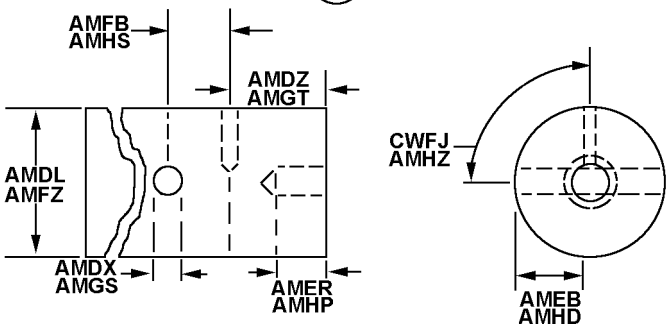
TWO CROSS DRILLED HOLES AND EXTERNALLY THREADED

89

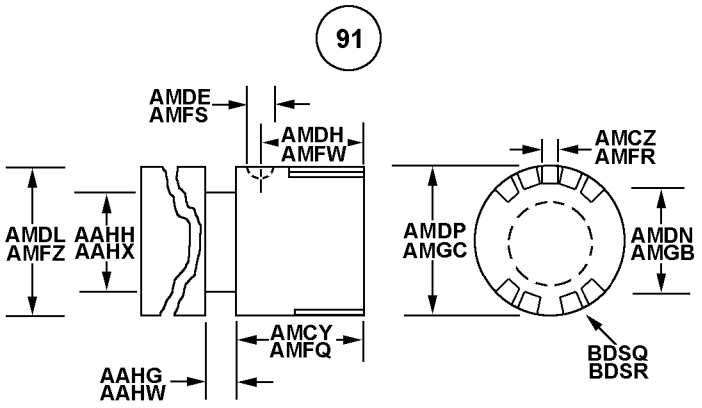


CIRCULAR GROOVED, TAPERED WITH FLAT AND FLAT KEYWAY

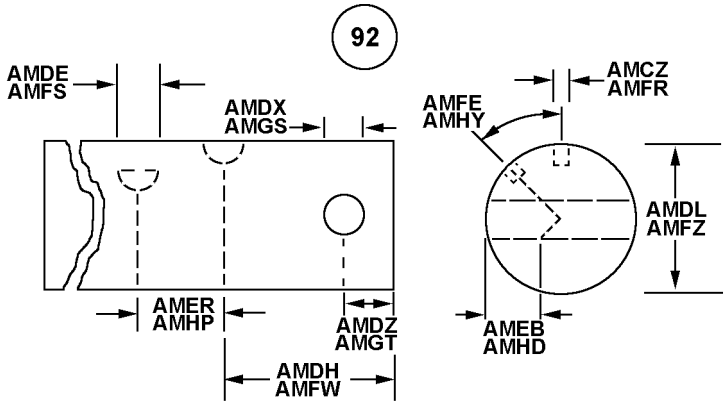
90



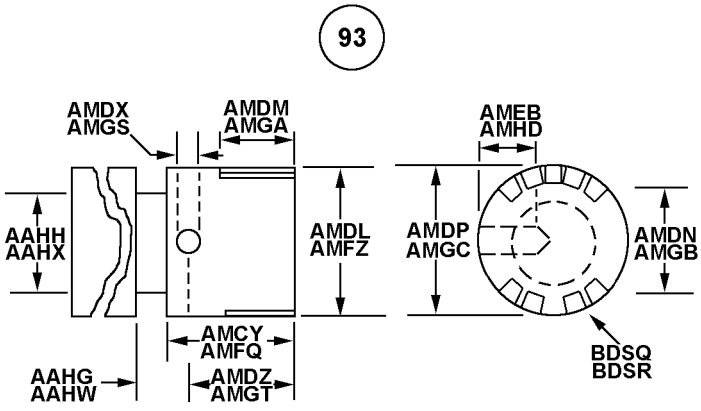
TWO CROSS DRILLED HOLES AND INTERNALLY THREADED



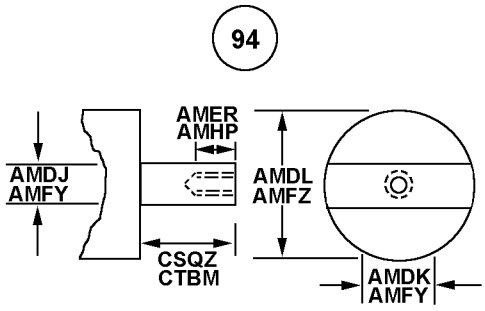
CIRCULAR GROOVED. WOODRUFF KEYWAY AND SPLINED (STRAIGHT)



TWO WOODRUFF KEYWAYS AND CROSS DRILLED HOLE

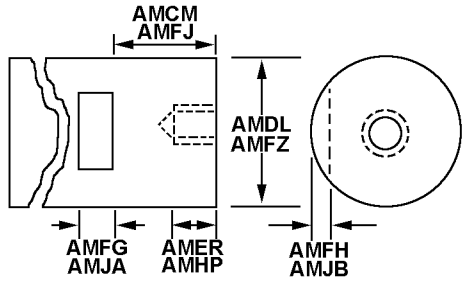


CIRCULAR GROOVED, CROSS DRILLED HOLE AND SPLINED (STRAIGHT)



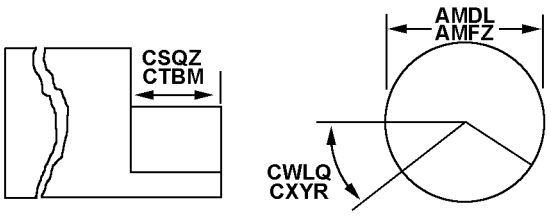
TONGUE AND INTERNALLY GROOVED

95



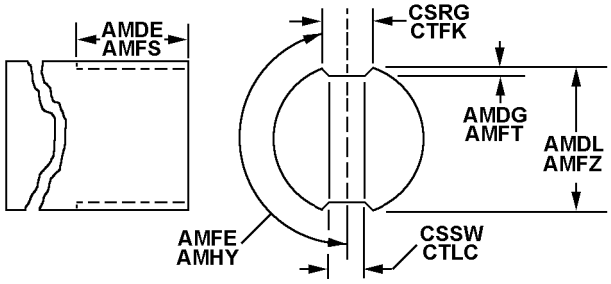
FLAT GROOVED AND ANTERNALLY THREADED

96



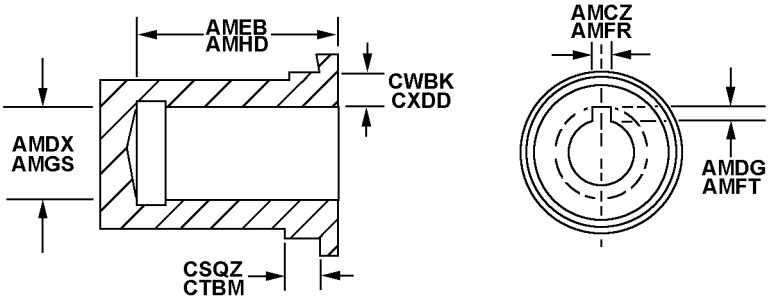
TWO FLATS

97



DUAL KEYWAY

98



FLANGED AND INTERNAL KEYWAY

Technical Data Tables

STANDARD FRACTION TO DECIMAL CONVERSION CHART

4ths	8ths	16ths	32nds	64ths	To 3	To 4	4ths	8ths	16ths	32nds	64ths	To 3	To 4
				1/64	.016	.0156					33/64	.516	.5156
			1/32	-----	.031	.0312				17/32	------	.531	.5312
				3/64	.047	.0469					35/64	.547	.5469
		1/16	-----		.062	.0625			9/16	-----	-----	.562	.5625
				5/64	.078	.0781					37/64	.578	.5781
			3/32	-----	.094	.0938				19/32	------	.594	.5938
				7/64	.109	.1094					39/64	.609	.6094
	1/8	-----	-----	-----	.125	.1250		5/8	-----	-----	-----	.625	.6250
				9/64	.141	.1406					41/64	.641	.6406
			5/32	-----	.156	.1562				21/32	------	.656	.6562
				11/64	.172	.1719					43/64	.672	.6719
		3/16	-----	-----	.188	.1875			11/16	-----	-----	.688	.6875
				13/64	.203	.2031					45/64	.703	.7031
			7/32	------	.219	.2188				23/32	------	.719	.7188
				15/64	.234	.2344					47/64	.734	.7344
1/4	-----	-----	-----	-----	.250	.2500	3/4	-----	-----	-----	-----	.750	.7500
				17/64	.266	.2656					49/64	.766	.7656
			9/32	------	.281	.2812				25/32	------	.781	.7812
				19/64	.297	.2969					51/64	.797	.7969
		5/16	-----	-----	.312	.3125			13/16	-----	-----	.812	.8125
				21/64	.328	.3281					53/64	.828	.8281
			11/32	------	.344	.3438				27/32	------	.844	.8438
				23/64	.359	.3594					55/64	.859	.8594
	3/8	-----	-----	-----	.375	.3750		7/8	-----	-----	-----	.875	.8750
				25/64	.391	.3906					57/64	.891	.8906
			13/32	------	.406	.4062				29/32	------	.906	.9062
				27/64	.422	.4219					59/64	.922	.9219
		7/16	-----	-----	.438	.4375			15/16	-----	-----	.938	.9375
				29/64	.453	.4531					61/64	.953	.9531
			15/32	------	.469	.4688				31/32	------	.969	.9688
				31/64	.484	.4844					63/64	.984	.9844
					.500	.5000						1.000	1.0000

FIIG Change List

FIIG Change List, Effective September 3, 2010.

This change replaced with ISAC or and/or coding.